OPR is AGL-1SP

Mr. Cooper
Many Thanks
Again.
J. Spa

CAPP

Citizens against Plane Pollution
Park Ridge, IL

April 28, 2011

Representative John Mica
Chairman
U.S. House Comte on Transportation & Infrastructure
Washington, D.C. 20515-6256

Mr. Randy Babbitt
Administrator
Federal Aviation Administration
800 Independence Blvd, S.W.
Washington, D.C.

Mr. Barry Cooper
Federal Aviation Administration
Great Lakes Regional Offices
2300 East Devon Ave
Des Plaines. IL 60016

Re: Request to revise the Night Time take off procedures programmed For the City of Park Ridge from 10 pm until 7 am.

Good Morning:

Thank you once again for taking the time to review our formal request to have the current take off procedures at O'Hare for the night time departures revised for the six thousand impacted families.

As we speak, aircraft are taking off at John Wayne airport under the approved FAA program are allowing the current families of new Port Beach, California the opportunity to regain their sleep.

Furthermore we understand after speaking with their city manager there - that all airlines that use John Wayne airport - have their own FAA approved noise abatement departure procedure as well.

We have confirmed that there is no excessive use of fuel involved here as well as placing any of the resident's lives in jeopardy with the approved and current JWA take off procedure. The FAA flight take tests that were also conducted with this revised noise abatement take off procedure - were completed without incident.

Additionally, we understand that the grid space in that regional is -- complex with JAX airport which also serves as an Airport Hub --much like O'Hare with the FAA approved class "B" airspace.

Given the recent FAA stat's on the increased percentage of take offs vs. targeting and use of the air space over the city of Park Ridge - we understand that these exigent circumstances: 1). O'Hare has longer runways, 2). Our take off plates are being reviewed for revision by the DOA offices - air side, 3). The current airspace usage is 48 % to the East and 38 % to the NE Quadrant - all belonging to the city of Park Ridge - air cap.

Therefore, based on the aforementioned information that also which includes the data and analysis provided in the attachment - we believe that we should be afforded this opportunity to help our community in reducing the current loud levels of jet noise - at all hours of the night.

In closing, we support you in your mission to help with the containment, control and direction involving the entire aviation industry which also includes our air safety and the Hub and Spoke system.

"For those who remain unprotected - life has a taste that only those who remain under the take offs and landings can understand".

Sincerely,

Attachment

Cc: **Mr. Jim Hock,** City Manager, City of Park Ridge
Mr. Brendan McLaughlin, Executive Director, O'Hare Noise Compatibility Commission, O'Hare Airport

Date:
April 19, 2011

Submitted
To:
O'Hare Noise Compatibility Commission
Federal Aviation Administration
City of Park Ridge

For:
Night Time Relief
Supplemental Noise Abatement

Re:
Fly Quiet Program
Request to revise the night time take off procedure – plate for the City of Park Ridge, Illinois.

By:
CAPP – Citizens against Plane Pollution

April 20, 2011

To: Reviewing Agencies & Those Interested U.S. Based Aviation NGO's
From:
Subject: Request for Review
Re: O'Hare Volunteer Fly Quiet Program - Request to Upgrade/Revise

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Today, we wish to thank those agencies that have given us the opportunity to present the case of the people of the city of Park Ridge that remain impacted from the Night Time Departures from O'Hare Airport.

We also wish to thank those aviation non-governmental-organizations across our Grid space who also have contributed to our continued efforts to seek relief from the night time disturbances from the commercial programmed flights.

And finally, we wish to thank the city of New Port Beach in taking the time out to share their successes in helping their residents by managing the night time take offs at John Wayne Airport as well.

The current Take Off Noise Abatement Departures at JWA are monitored for compliance through the positioned Noise Monitors. The current city ordinance that is in place - also is the template for the night time relief measures in tracking potential violations.

Finally, the FAA approved take off procedure at JWA is working and has met all criteria set forth by the United States Department of Transportation as well as by being monitored by the Federal Aviation Administration.

As a community here in Park Ridge, we look forward towards that same type of cooperation and approach from all agencies concerned in our combined efforts to help reduce the night time disturbances and help improve the sleep patterns of those living within the take off plate(s) of Park Ridge - proper.

See attachments - CAPP requested revised Take Off Fly Quiet Plan

Cc: ONCC, FAA & City Mgr City of Park Ridge

Supplemental Noise Abatement - Take Off Plan for the City of Park Ridge

To: Reviewing Agencies - And other interested aviation NGO's

From:

Subject: Failed Policies involving night time take offs at O'Hare

Re: Revision to upgrade the Fly Quiet Program - When approved by the reviewing agencies - together.

Responbisible Agency:	Action To Be Taken:
1). ONCC.....	Review ORD take off plates, Review JWA Take Off procedures for application.
2). FAA.....	FAA for Determination of Noise Abatement - JWA Take Off Procedure for O'Hare Airport.
3). City of Park Ridge.....	City Manager to review and submit to The proper committee for further adoption And approval by the City Council.

Volunteer Noise Abatement
Proposal with supplemental
Requested - revised night time
Take off procedure for the city
of Park Ridge - proper.

Date: April 2011
Subject: Recommended - Revised O'Hare Night time Take Offs – Park Ridge community
To: The Interagency Governmental Authorities
Cc: Aviation Non-Govt-Organizations
By:

CAPP - CITIZENS AGAINST PLANE POLLUTION

O'Hare Noise Abatement Proposal [Revised 4/17/2011]

Supplemental Noise Abatement Take Off Procedure for O'Hare Airport during the night time flight operations.
[See current take off plates provided].

Today, all flights leaving *John Wayne Airport* must adhere to the Noise Reduction Departure procedures – Profile that have been established at JWA and approved by the Federal Aviation Administration – while enforced by the area communities outside the fence line. Today we ask for a review of the same take off procedure for the *Park Ridge community* by all AHJ.

All flight - carriers must comply [passenger and cargo] with the following take off procedure – in brief:

1). Take off position assumed

2). Full power up to 95 - 97 %

3). Steep climb up and out [See take off plate]

4) Reduce - engine power - reduction at 500 - 700 Feet A.G.L.

5) Complete two turns at a minimum while in the above quiet mode to avoid the collar community of Park Ridge and others in the take off pattern.

See attachments for further information to support this essential request.

U.S. SENATE

Date: February 21, 2010
To: The Interagency Governmental Authorities
Cc: Aviation Non Governmental Organizations
By:

CAPP – Citizens Against Plane Pollution

ORD Noise Abatement Proposal [Revised 2/20/2010]

Sleep Disturbances – Jet fuel emission dumps – Property Devalnations

The Fly Quiet Program provides comprehensive guidance for pilots to use designed nighttime preferential flight tracks developed by the Department of Aviation in Cooperation with the O'Hare and Midway Noise Compatibility Commissions, the airlines, and the Air Traffic Controllers.

The Chicago Department of Aviation distributes Fly Quiet Aviator's Manuals to airlines pilots and air traffic controllers that contain information on preferred runways and flight tracks which route aircraft over the least populated areas –such as forest preserves, highways, as well as commercial and industrial areas.

Source: http://www.ohare.com/cnrc/ohare/o_noise_flyquiet.shtm

ONCC
Mission Statement:
To assist in the developing meaningful methods of reducing the impact of aircraft noise on our surrounding neighborhoods through home and school sound insulation and to reduce wherever possible, aircraft noise at its source.

Vision Statement: The O'Hare Noise Compatibility Commission will build and maintain coalitions of communities and citizens dedicated to the reduction of aircraft noise at and near O'Hare International Airport, and thereby enhance the quality of life for all area residents here in Park Ridge.

Source: http://www.oharenoise.org/mission.htm

The unnecessary use of runway 9L27R violates the mission and intent of the Fly Quiet Program and ONCC.

Landing on runway27R allows for 112 arrivals per hour vs. 100 arrivals per hour for an improvement of 12%. This comes at a cost. The taxi time to the gates is an extra 10-15 minutes along with extra flight time for aircraft arriving on the PAITN.PAITN arrival. As of now airlines have not yet complained to the FAA. According to the O'Hare Modernization Plan – EIS Exhibit D-10, the use of RWY 27R will save approx 6 to 7 minutes in the average annual delay. In reality, landing this runway under VMC (Visual

Meteorological Conditions) which provide a negative benefit for the public and airlines.

To be fair this 6 to 7 minute savings is for all aircraft landing all runways when the weather is bad but under VMC conditions the savings is nil and under current volume. The approach path of 27R also allows jets to fly over Maine South High School as low as 396 Feet – AGL.

Schools are considered particularly noise sensitive. The approach of path 22R contains primarily industrial and commercial real estate. These areas are not noise sensitive and were developed after the runway.

Maine South High School was in place well before 27R was even considered. Once more Maine South High School is classified as a ***"Park"*** so desired decibel readings can be acceptable by the FAA standards?

As part of the Fly Quiet Program the City of Chicago should land RWY 27R only under IMC (Instrument Meteorological Conditions) as this maximizes the benefit of the runway while minimizing the impact to underlying community.

The following points and procedures are specific and necessary to minimize the negative impact of the OMP on the residents of Park Ridge without impacting operations at ORD under current volume of arriving and departing aircraft.

As it stands today, the city of Park Ridge will be impacted three times over with the three major runways and the ***"triple effect"*** involving noise, toxicity levels, sleep disturbances, and reduced homes values on top of the economic downturn from the direct result of the OMP.

Land Runway 22R under VMC conditions:
The major benefit of 27R comes into play primarily when ORD is under IMC conditions (ORD-EIS). When 27R is utilized under VMC conditions the airlines and passengers are subjected to an additional 5 minutes flight time as they are vectored away from the airport to the middle of Lake Michigan to line up with 27R now or the upcoming 9C and 9L [extended] for that matter. This unnecessary addition of flight And taxi times – burns an extraordinary amount of fuel over a given time frame and does not abode well with the current carbon foot print across the country and across the skies of the area collar communities. So much for going "greener" and the environment.

Land Runway 27R only when necessary:
Currently the volume under VMC and some IMC conditions does not warrant the excessive use this Runway receives. Aircraft are allowed to fly at over many schools while on final approach. The EIS allows this because it's based on modeling and a 24 hour average [which is very unfair to those residents – students attempt to gain an education within these places of learning.

Departures late at night:
These flights should be vectored over industrial and non residential areas – when possible in order to further assist these residents located in the glide paths of Park Ridge to obtain somewhat relief during the late night hours of flight operations.

Many flights through the night operate with the larger scale cargo freighters use 32L and then climb out and over Park Ridge while fanning and changing course. This practice must be revised and allow the families a ***release valve*** from the 18 hours per day – 30 second pounding that we take in daily.

We understand that Departure Control has given these lumbering larger aircraft vectors over residential areas before any noise friendly altitude has been achieved. This practice could be revised – with the help of our proposal.

The most recent built Boeing cargo freighter 747 – 800 creates one quarter of a million pounds of thrust on every take off!

According to Public Act 93-0450 O'Hare Modernization Act section 5(a3) "The O'Hare Modernization program will enhance the economic welfare of the State of Illinois and its residents. This has come with an extreme economic burden to the homeowners of the surrounding communities. Home values under Runway 27R have dropped more than 30% in addition to the most recent home price decline.

Adopting the aforementioned suggestions is a simple step in noise reduction and lessoning the impact on the people and the community as a whole.

Reducing delays, smaller jets, and better arrival times will all bring in the revenues that are sought at O'Hare Airport.

We also need to applaud U.S. Congressman in seeking the truth to the recent GAO reports involving air safety and ground runway and ramp security at O'Hare.

Source: www.gao.gov

When the original idea was to get people from airport to airport in a safe and timely manner under any conditions and across the nationwide grid space from Hub to spoke is forgotten – then the concept of " *people first and property second* " has Been eliminated as the primary factor in Air – Life Safety operations.

Gmail by Google

Growth in Airport Noise Restrictions and More

1 message

Wed, Apr 20, 2011 at 7:39 AM

Sent Via Email & U.S. Mail

Mr. Randy Babbitt
Administrator
Federal Aviation Administration
800 Independence Blvd, S.W.
Washington, D.C.

cc: Mr. Barry Cooper - G-Lakes Offices
2300 Building
Des Plaines, IL 60016

Good Morning,
Thank you for allowing this letter to reach you via FAA channels.

I understand that you have a full plate so today - we respectfully ask to come right to the point of the correspondence as outlined.

As you are fully aware, the growth in airport noise restrictions - continues to climb. Since 1970 when the public decided to become educated that " noise does matter", we have seen an increase in restrictions being placed upon the many airports in and around our country.

Furthermore, we have seen the " Hub and Spoke system " become this country's mainstay in 1). Processing cargo and 2). carrying passengers to the destinations. Let's also remember that the current fleets are also getting bigger with the introduction of the Air bus 380 as well as the Boeing 747-800 which stands 20 feet longer and needs a 1/4 of a million pounds of jet thrust to get off the ground - each time and each plane.

With over 500 airports reporting.....we can see where the following have become the standard in measuring noise over the collar communities:

- NAP's

- Curfews

- Noise Charges

- Noise Level Limits

- Operating Quotas

- CH3 Restrictions

Today, we call on you and the FAA to further review our request to revise the Night Time Departure Control Desk's nightly preplanned
out bound air line flight activity by revising the current take off procedure over our community.

Currently the City of New Port Beach, Ca has enjoyed that change in the FAA take off noise abatement program/ORD for sometime now.
This type of take off - has not caused any problems or air safety issues with the surrounding communities as well. We should also add
that all carriers who fly in and out of John Wayne airport - have their own flight take off noise abatement --pilot plan.

Some communities are fortunate to have congressional help in efforts such as these to improve the way of life for their constituents----
yet some are not so fortunate.

Shortly , we will deliver our written request to your G - Lakes regional offices for submission and further review by not only
Mr. Barry Cooper but yourself included.

We personally want to again thank Mr. Barry Cooper for taking the time recently in putting together the much needed
research which we base this request for review for the current night time take offs at O'Hare that targeting involving the 1). East at 35 % [Park Ridge] and
2). The North East Quadrant at 38 % [Park Ridge].

Source: FAA Response letter/package sent to CAPP

Thank you once again for keeping air safety as well as our public safety - here on the ground and in the glide paths - a top priority.

Respectfully,

John Wayne Airport to include Flight data, analysis, New Port Beach city ORD

SUMMARY OF STATISTICAL INFORMATION FOR CALIFORNIA DEPARTMENT OF TRANSPORTATION

1. Size of Noise Impact Area as defined in the Noise Standards (California Code of Regulations, Title 21, chapter 2.5, Subchapter 6):
   3.58 acres (or 0.005 square miles)

2. Estimated Number of dwelling units included in the Noise Impact Area as defined in the Noise Standards:
   66

3. Estimated number of people residing within the Noise Impact Area as defined in the Noise Standards:
   165 (based on 2.5 people per dwelling)

4. Identification of aircraft of type having highest takeoff noise level operating at this airport together with estimated number of operations by this aircraft type during the calendar quarter reporting period:
   B737-800 – 2,584 ops (arrivals + departures)

5. Total number of aircraft operations during the calendar quarter:
   49,182

6. Number of Air Carrier operations during the calendar quarter:
   (Not mandatory)
   21,013

7. Percentage of Air Carrier operations by aircraft certified under Federal Aviation Regulation (FAR) Part 36, Stage III:
   (Not mandatory)
   100%

8. Estimated number of operations by General Aviation aircraft during the calendar quarter:
   (Not mandatory)
   28,157

9. Estimated number of operations by Military aircraft during the calendar quarter:
   (Not mandatory)
   12

SAN DIEGO/EL CAJON, CA

GILLESPIE FIELD (SEE)

AMDT 5 11041 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9L,** 900-2¾ w/ min. climb of 400' per NM to 3600. **Rwy 9R,** 900-2¾ w/ min. climb of 405' per NM to 3600. **Rwy 17,** std. w/ min. climb of 465' per NM to 1900. **Rwy 27L,** std. w/ min. climb of 495' per NM to 3600 or 2500-2¼ w/ min. climb of 411' per NM to 3600. **Rwy 27R,** std. w/ min. climb of 605' per NM to 3600 or 2500-2 w/ min. climb of 435' per NM to 3600. **Rwy 35,** std. w/ min. climb of 460' per NM to 2200.

DEPARTURE PROCEDURE: **Rwys 9L, 9R, 27L, 27R,** climbing right turn on heading 165° and MZB R-076 to MZB VORTAC. **Rwy 17,** climb on heading 165° and MZB R-076 to MZB VORTAC. **Rwy 35,** climbing left turn on heading 165° and MZB R-076 to MZB VORTAC.

NOTE: **Rwy 9L,** rising terrain beginning 11' from DER, 202' left of centerline, up to 398' MSL. Vehicle on road beginning 604' from DER, 3' right of centerline, up to 17' AGL/450' MSL. Sign 739' from DER, 442' right of centerline, 40' AGL/448' MSL. Bridge 784' from DER, on centerline, 10' AGL/408' MSL. Building 916' from DER, 355' left of centerline, 40' AGL/448' MSL. Trees beginning 940' from DER, 28' left of centerline, up to 100' AGL/557' MSL. Poles beginning 1101' from DER, 153' right of centerline, 40' AGL/455' MSL. Poles beginning 1173' from DER, 314' left of centerline, up to 42' AGL/462' MSL. Trees beginning 1269' from DER, 66' right of centerline, up to 100' AGL/628' MSL. Building 1418' from DER, 421' left of centerline, 40' AGL/451' MSL. **Rwy 9R,** poles beginning 921' from DER, 68' right of centerline, up to 50' AGL/442' MSL. Vehicle on road beginning 1544' from DER, 404' left of centerline, up to 17' AGL/450' MSL. Sign 1679' from DER, 25' right of centerline, 40' AGL/448' MSL. Buildings beginning 1855' from DER, 772' left of centerline, up to 40' AGL/450' MSL. Trees beginning 1879' from DER, 65' left of centerline, up to 100' AGL/691' MSL. Poles beginning 2112' from DER, 263' left of centerline, up to 42' AGL/462' MSL. Trees beginning 2490' from DER, 258' right of centerline, up to 100' AGL/505' MSL. **Rwy 17,** fence 14' from DER, 42' right of centerline, 10' AGL/393' MSL. Poles beginning 50' from DER, 33' right of centerline, up to 40' AGL/428' MSL. Buildings beginning 240' from DER, 290' right of centerline, up to 70' AGL/463' MSL. Poles beginning 266' from DER, 150' left of centerline, up to 40' AGL/440' MSL. Antenna on hanger 282' from DER, 325' left of centerline, 40' AGL/421' MSL. Trees beginning 390' from DER, 377' right of centerline, up to 100' AGL/473' MSL. Buildings beginning 670' from DER, 57' left of centerline, 40' AGL/429' MSL. Trees beginning 1068' from DER, 54' left of centerline, up to 100' AGL/472' MSL. **Rwy 27L,** aircraft on taxiway 9' from DER, 195' left of centerline, 15' AGL/384' MSL. Trees beginning 1548' from DER, 700' right of centerline, up to 100' AGL/453' MSL. Trees beginning 2943' from DER, 464' left of centerline, up to 60' AGL/470' MSL. **Rwy 27R,** trees beginning 179' from DER, 54' right of centerline, up to 100' AGL/453' MSL. Poles beginning 316' from DER, 161' right of centerline, 40' AGL/390' MSL. Railroad 511' from DER, 412' left of centerline, 23' AGL/379' MSL. Obstruction light on RR signal 799' from DER, 83' left of centerline, 30' AGL/390' MSL. Trees beginning 2069' from DER, 71' left of centerline, up to 100' AGL/470' MSL. Pole 2142' from DER, 95' left of centerline, 30' AGL/420' MSL. **Rwy 35,** poles beginning 50' from DER, 29' right of centerline, up to 50' AGL/431' MSL. Buildings beginning 61' from DER, 134' right of centerline, up to 10' AGL/388' MSL. Trees beginning 179' from DER, 67' right of centerline, up to 100' AGL/447' MSL. Pole 593' from DER, 336' left of centerline, 35' AGL/396' MSL. Trees beginning 670' from DER, 118' left of centerline, up to 100' AGL/439' MSL.

SAN LUIS OBISPO, CA

SAN LUIS COUNTY RGNL

TAKE-OFF MINIMUMS: **Rwys 7, 25, NA. Rwy 11,** 1800-2 or std. with a min. climb of 320' per NM to 2300. **Rwy 29,** 1200-2 or std. with a min. climb of 390' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 11,** climb runway heading to 900, then climbing right turn direct MQO VORTAC. **Rwy 29,** climb via runway heading and MQO R-050 to MQO VORTAC. All aircraft departing on MQO R-130 CW R-320 climb on course. All others continue climbing in MQO holding pattern (SE, left turns, 306° inbound) to cross MQO VORTAC at or above 4000.

SAN NICOLAS ISLAND NOLF (NSI)

SAN NICOLAS ISLAND, CA

Rwy 12: Diverse departures authorized 300° to 120° CW.

Rwy 30: Diverse departures not authorized. Rwy 30 climb heading 300° to 1300', then turn right to assigned heading.

Rwy 12-30: Obstacle identification surface begins 10 ft above departure end of runway.

TKOFF OBSTACLES: **Rwy 30:** 1076' MSL (589' AGL) Tower, 2805' past DER, 1882' left of centerline.

SANTA ANA, CA

JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)

AMDT 5 09239 (FAA)

DEPARTURE PROCEDURE: **Rwys 1L, 1R,** climbing left turn direct SLI VORTAC. **Rwys 19L, 19R,** climbing right turn direct SLI VORTAC. All aircraft climb in SLI holding pattern (hold South, left turns, 351° inbound) to cross SLI VORTAC at or above MEA for direction of flight before proceeding on course.

NOTE: **Rwy 1L,** multiple trees beginning 466' from DER, 553' left of centerline, up to 85' AGL/127' MSL. Light pole 94' from DER, 490' left of centerline, 21' AGL/63' MSL. Obstruction light on DME 497' from DER, 625' right of centerline, 13' AGL/55' MSL. **Rwy 1R,** obstruction light on DME 497' from DER, 125' right of centerline, 13' AGL/55' MSL. Tree 1745' from DER, 209' right of centerline, 51' AGL/85' MSL. Light pole 1104' from DER, 307' right of centerline, 34' AGL/68' MSL. **Rwy 19R,** WSK on HGR 536' from DER, 605' left of centerline, 44' AGL/92' MSL. Multiple trees beginning 289' from DER, 500' right of centerline, up to 52' AGL/108' MSL. Light poles beginning 204' from DER, 490' right of centerline, up to 35' AGL/85' MSL. Tree 1574' from DER, 765' left of centerline, 59' AGL/113' MSL.

07 APR 2011 to 05 MAY 2011

07 APR 2011 to 05 MAY 2011

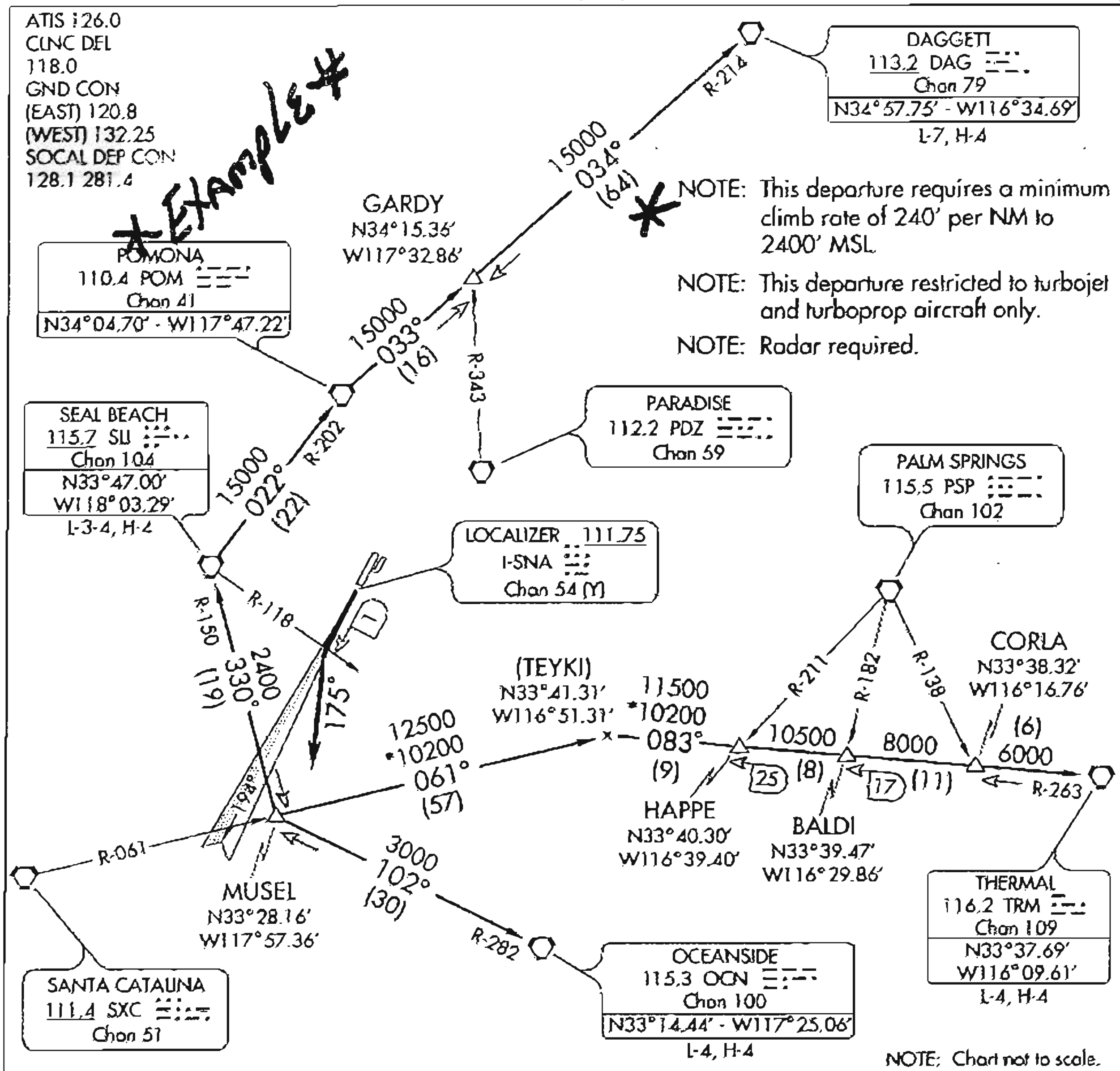
* Noise Abatement Take Off *

For O'Hare AP 10PM to 6:59 AM

(MUSEL6.MUSEL) 07298

MUSEL SIX DEPARTURE

SANTA ANA/JOHN WAYNE AIRPORT-ORANGE COUNTY (SNA)
SL-377 (FAA)
SANTA ANA, CALIFORNIA



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 19L/R: Maintain runway heading or I-SNA localizer south course to I-SNA 1 DME fix or SLI R-118, turn left heading 175° for radar vectors to MUSEL INT, then via (transition) or (assigned route). Expect filed altitude ten minutes after departure.

DAGGETT TRANSITION (MUSEL6.DAG): From over MUSEL INT via SLI R-150 to SLI VORTAC, then via SLI R-022 and POM R-202 to POM VORTAC, then via POM R-033 and DAG R-214 to DAG VORTAC.

OCEANSIDE TRANSITION (MUSEL6.OCN): From over MUSEL INT via OCN R-282 to OCN VORTAC.

SEAL BEACH TRANSITION (MUSEL6.SLI): From over MUSEL INT via SLI R-150 to SLI VORTAC.

THERMAL TRANSITION (MUSEL6.TRM): From over MUSEL INT via SXC R-061 and TRM

*Can You Help us Here w/ This Same T/off

GENERAL AVIATION NOISE ORDINANCE

ARTICLE 3. NOISE

Sec. 2-1-30.1. Policy.

As proprietor of John Wayne Airport, the County of Orange, by its Board of Supervisors, is empowered to restrict or deny the use of its Airport based upon noise considerations and finds it is in the public interest to minimize any risk of potential liability to the County of Orange for claims of damage caused by noise associated with aircraft operations at John Wayne Airport. This article reflects the intent of the Board of Supervisors of Orange County to enact a reasonable regulatory scheme, using the legislative process, to minimize noise and any potential for damage liability, which does not unjustly discriminate between types, kinds or classes of aeronautical uses.

(b) Any aircraft operator or person desiring to use John Wayne Airport for the purpose of commercial airline or general aviation operations shall be authorized, pursuant to this article, to engage in such use provided that all aircraft operations are in compliance with noise standards as set forth in this article and as set forth in the Phase 2 Commercial Airline Access Plan and Regulation. Consistent with the noise standards as enumerated in this article, the Board of Supervisors of Orange County does hereby grant a revocable license to use John Wayne Airport by commercial airline and general aviation aircraft as such are defined in this article.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 04-016, § 16, 9-9-04)

Sec. 2-1-30.2. Reserved.

Sec. 2-1-30.3. Definitions.

(a) *Class A and Class E Aircraft,* for the purposes of this Division, shall mean aircraft which: (i) operate at maximum permitted gross takeoff weights at John Wayne Airport not greater than the maximum permitted gross takeoff weight for the individual aircraft main landing gear configuration, of 140,000 pounds for dual gear and 300,000 pounds for dual tandem gear; and which (ii) generate actual energy average SENEL levels during takeoff, averaged during each noise compliance period, as measured at the John Wayne Airport noise monitoring stations ("NMS"), which are not greater than the SENEL values specified in Section 2-1-30.4. In determining whether an aircraft is a Class A or Class E Aircraft, its noise performance at the noise monitoring stations shall be determined at each individual noise monitoring station and the aircraft must meet each of the noise monitoring station criteria, without "trade-offs," in order to qualify as Class A or Class E Aircraft.

(b) *Commercial Air Carrier Aircraft,* for the purposes of this Division, shall mean those aircraft operated as a federally certificated air carrier at John Wayne Airport under a current Certificated Passenger Airline Lease or Operating Agreement granted by the Orange County Board of Supervisors.

(c) *dB:* A-weighted sound pressure level or A-level shall mean, for the purposes of this Division, the sound pressure level as measured using the slow dynamic characteristic for sound level meters specified in American National Standard Specification for Sound Level Meters, (ANSI S 1.4-1983, Type 1 for Aircraft Noise Measurement), which is hereby incorporated by reference. The A-weighting characteristic modifies the frequency response of the measuring instrument to account approximately for the frequency characteristics of the human ear. The reference pressure is 20 micronewtons/square meter (2×10^{-4} microbar).

(e) *General Aviation Aircraft,* for the purposes of this article, shall mean all other aircraft operated at John Wayne Airport, except those as defined in Section 2-1-30.3(b) or exempted under Section 2-1-30.6.

(f) *Arrival,* for the purposes of this Division, shall mean the flight of an aircraft from the time it descends for its approach on Runway 19L/R or Runway 01L/R until it is taxied from the runway.

(g) *Noise Compliance Period,* for the purposes of this Division, shall mean each calendar quarter (successive three-month periods) occurring at regular intervals four (4) times a year, the first quarter of any given year beginning on the first day of April, the last quarter of any given year ending on the thirty-first day of March of the succeeding calendar year.

(h) *Regularly Scheduled Commercial User,* for the purposes of this Division, shall mean any person conducting aircraft operations at John Wayne Airport for the purpose of carrying passengers, freight, or cargo where such operations: (i) are operated in support of, advertised, or otherwise made available to members of the public by any means for commercial air transportation purposes, and members of the public may travel or ship commercial cargo on the flights; (ii) the flights are scheduled to occur, or are represented as occurring (or available) at specified times and days; and (iii) the person conducts, or proposes to operate, departures at John Wayne Airport at a frequency greater than two (2) times per week during any consecutive three (3) week period.

(i) *Single Event Noise Exposure Level ("SENEL"):* The single event noise exposure level, in decibels, for the purposes of this Division, shall mean the noise exposure level of a single event, such as an aircraft fly-by, measured over the time interval between the initial and final times for which the noise level of a single event exceeds a predetermined threshold noise level. For implementation of this Section, the threshold noise level shall be at least ten (10) decibels below the numerical value of the single event noise exposure level limits specified in Sections 2-1-30.4(a), 2-1-30.5 or 2-1-30.6, as the case may be. Specific SENEL limitations, for purposes of this article, shall be determined at each noise monitoring station without "trade-offs" between noise monitoring stations.

(j) *Departure,* for the purposes of this Division, shall mean the flight of an aircraft from the time it commences its departure on Runway 19L/R or Runway 01L/R.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 00-1, § 2, 2-1-00; Ord. No. 04-016, § 17, 9-9-04)

Sec. 2-1-30.4. Commercial airline operations.

(a) No person may engage in commercial airline operations at John Wayne Airport if such aircraft generate a SENEL level at any of the following respective noise monitoring stations ("NMS"), averaged over each noise compliance period, which is greater than the following SENEL values for Class A aircraft when operating as a Class A operation and for Class E aircraft when operating as a Class E operation:

	Class A	Class E
NMS 1S	101.8 dB	93.5 dB
NMS 2S	101.1 dB	93.0 dB
NMS 3S	100.7 dB	89.7 dB
NMS 4S	94.1 dB	86.0 dB
NMS 5S	94.6 dB	86.6 dB
NMS 6S	96.1 dB	86.6 dB
NMS 7S	93.0 dB	86.0 dB

(b) The location of the noise monitoring stations shall be as set forth in the John Wayne Airport Regulations.

(c) *Curfew.* No aircraft may engage in regularly scheduled commercial operations at John Wayne Airport as follows: (i) for departures between the hours of 10:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays) (local time), as measured at any John Wayne Airport noise monitoring

Editor's note: Ord. No. 00-1, § 1, adopted February 1, 2000, amended the Code by repealing former § 2-1-30.2 in its entirety. Former § 2-1-30.2 pertained to remedies for violation, and derived from Ord. No. 3642, adopted June 16, 1987; and Ord. No. 3793, adopted September 11, 1990.

Airport Director under procedures and limitations specified in Section 8.9.3 and Section 11 of the Phase 2 Commercial Airline Access Plan and Regulation if a commercial aircraft, or if a general aviation aircraft by furnishing contrary evidence, including but not limited to, any change in operating personnel, any retro-fitting measure, any change in engine or of maintenance or performance of a noise qualification test.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 04-016, § 21, 9-9-04)

Sec. 2-1-30.8. Denial of use of airport.

(a) In the event that any aircraft owner or operator has three (3) or more violations of Section 2-1-30.4 or 2-1-30.5 of this article within any three-year period, then for a period of three (3) years after the date of the third, or most recent, violation, such aircraft owner and/or operator shall be denied the right to arrive at or depart from John Wayne Airport, except in dire emergencies for the preservation of life or property as reasonably determined by the Airport Director, and, except for when otherwise modified, shall be denied the right to lease, rent or use space for aircraft (including tie-down) at the Airport insofar as the County has the right to deny such use of John Wayne Airport.

(b) In the event any aircraft owner or operator referred to in subsection (a) of this Section is a corporation or partnership which is owned, controlled or succeeded by another person, corporation or partnership which either operates at the Airport, or which owns or controls aircraft which could operate at the Airport (affiliated person or entity), the Airport Director may also deny the use of the Airport for a like period to: (1) the affiliated person or entity; and (2) any persons, owners or operators which are owned or controlled by the affiliated person or entity, if the Airport Director determines that such disqualification is necessary or appropriate to permit effective enforcement of the prohibitions and penalties established by this Ordinance.

(c) For purposes of subsection (b) of this Section, a person, owner or operator owned or controlled by an affiliated person or entity shall be deemed to include: (1) any aircraft owner or operator in which the affiliated person or entity owns or controls ten percent or more of the equity or voting rights; and (2) any aircraft owner or operator operating aircraft at the Airport which are leased or licensed from the disqualified owner or operator, or any affiliated person or entity of the disqualified owner or operator.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 04-016, § 22, 9-9-04)

Sec. 2-1-30.9. Exclusion of violation-prone aircraft.

In the event that any aircraft is operated by any aircraft owner or operator who has three (3) or more violations of Section 2-1-30.4 or 2-1-30.5 of this article within a three-year period then it shall be presumed that operation of such aircraft will result in a continued violation of the provisions of Section 2-1-30.4 or 2-1-30.5 of this article and such aircraft will not be permitted to arrive at, tie down, be based at or depart from the Airport except in dire emergencies for the preservation of life or property; provided, however, any new owner or operator of such aircraft not denied the right to use JWA pursuant to Section 2-1-30.8 shall be entitled to rebut such presumption to the reasonable satisfaction of the Airport Director under procedures and limitations specified in Section 8.9.3 and Section 11 of the Phase 2 Commercial Airline Access Plan and Regulation if a commercial aircraft, or if a general aviation aircraft by furnishing contrary evidence, including, but not limited to, any change of operating personnel, any retro-fitting measure, any change in engine or of maintenance or performance of a noise qualification test.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 04-016, § 23, 9-9-04)

Sec. 2-1-30.10. Unlawful to use Airport after use denied.

(a) It shall be unlawful for any aircraft owner or operator to arrive at or depart from the Airport or to lease or rent space (including tie-down) for aircraft at the Airport after such owner and/or operator has been denied use of the Airport in accordance with the provisions of Section 2-1-30.8.

(b) It shall be unlawful for any aircraft owner and/or operator to arrive at or depart from the Airport after such aircraft has been excluded from the Airport pursuant to the provisions of Section 2-1-30.7 or 2-1-30.9.

(c) Violations of Section 2-1-30.10(a), (b) shall be a misdemeanor and shall be punishable as set forth in Section 1-1-34 of the Codified Ordinances of the County of Orange.
(See excerpt of Section 1-1-34 provided on Page 4)

(d) In the event that any aircraft owner or/operator arrives at or departs from the Airport after use has been denied, then for an additional period of three (3) years after the date of such violation and for each and every violation thereafter, such aircraft owner or operator shall be denied the right to land or take off from John Wayne Airport, except in bona fide emergencies for the preservation of life or property as is reasonably determined by the Airport Director, and for that period of time shall be denied the right to lease, rent, or use space for aircraft (including tie-down) at the Airport insofar as the County has the right to deny such use of John Wayne Airport.

(e) Within thirty (30) days after receipt of a Notice of Violation of Denial of Use, that violation may be appealed by sending a Notice of Appeal and Request for Hearing by regular U.S. mail to the attention of the Airport Director. The procedures set forth in section 2-1-30.14 of the Codified Ordinances of the County of Orange shall apply to the adjudication of such Notices of Appeal.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 00-1, § 5, 2-1-00; Ord. No. 04-016, § 24, 9-9-04)

Sec. 2-1-30.11. Culpability of instructor pilot.

In the case of any training flight in which both an instructor pilot and a student pilot are in the aircraft which is flown in violation of any of the provisions of this article, the instructor pilot shall be presumed to have caused such violation. The instructor pilot shall be entitled to rebut such presumption to the reasonable satisfaction of the Airport Director by furnishing evidence to the contrary.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90)

Sec. 2-1-30.12. Culpability of aircraft owner or lessee.

For purposes of this article, if the actual pilot or lessee of an aircraft cannot be identified, the owner and/or owners of an aircraft shall be presumed to be the pilot of the aircraft with authority to control the aircraft's operations, or presumed to have authorized or assisted the operation; except that where the aircraft is leased, the lessee shall be presumed to be the pilot, or to have authorized or assisted in the aircraft's operation. Such presumption may be rebutted only if the owner or lessee identifies the person who in fact was the pilot or aircraft operator at the time of the violation.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 04-016, § 25, 9-9-04)

Sec. 2-1-30.13. Enforcement officials.

The Airport Director, and such other Airport employees as are designated by the Airport Director and who are acting under the direction and control of the Airport Director, as well as personnel from an authorized law enforcement agency pursuant to the provisions of Penal Code Section 836.5, are authorized to enforce the provisions of this Division.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 00-1, § 6, 2-1-00; Ord. No. 04-016, § 26, 9-9-04)

Sec. 2-1-30.14. Enforcement procedures.

(a) Violation of Section 2-1-30.4 or 2-1-30.5 of this Division shall be a misdemeanor, punishable as set forth in Section 1-1-34 of the Codified Ordinances of the County of Orange.
(See excerpt of Section 1-1-34 provided on Page 4)

(b) As an alternative, the Airport Director is authorized to issue a Notice of Noise Violation to any aircraft, aircraft owner, aircraft operator, and/or any other responsible person for any violations of Section 2-1-30.4 or 2-1-30.5. The determination of whether to issue a Notice of Noise Violation shall be within the sole discretion of the Airport Director.

(c) *Notice Of Noise Violation.*

(1) A Notice of Noise Violation shall include a citation of the section violated, the noise readings at John Wayne Airport noise monitoring stations, the time and date of the violation, the type and registration number of the aircraft, the name of the aircraft owner, and/or the aircraft operator, if known, and any other pertinent information.

(2) A Notice of Noise Violation shall be sent by certified mail to the aircraft owner and/or aircraft operator, if known, within forty-five (45) days of the date of violation. If the aircraft operator is not known, and the aircraft owner identifies the person who in fact was the aircraft operator at the time of the violation and a current address for that person, a Notice of Noise Violation shall also be sent by certified mail to the aircraft operator within forty-five (45) days of the date the Airport is notified of the identity of the aircraft operator.

(d) *Right to Appeal the Notice of Noise Violation.*

(1) Within thirty (30) days after receipt of a Notice of Noise Violation, the aircraft owner and/or operator may appeal the Notice of Noise Violation by sending a Notice of Appeal by regular U.S. mail to the Airport Director.

(2) The Notice of Appeal shall be in writing and shall set forth a concise statement of: (i) each factual issue relevant to the violation; (ii) each legal issue relevant to the violation; (iii) the relief requested by the aircraft owner and/or operator; and (iv) whether a hearing is requested in connection with the Notice of Appeal. The Notice of Appeal shall include attachments of all documents relevant to the factual or legal issues raised and relied on in filing the Notice of Appeal. The Notice of Appeal shall further contain appropriate and full citation to any relevant legal authorities.

(3) It is the basic purpose of these rules to provide a reasonable, fair, constitutionally appropriate, and expeditious means by which persons contesting a Notice of Noise Violation imposed by the Airport Director can obtain review of the violation decision by administrative means.

To the extent this Section provides procedural processes and safeguards in excess of the minimum requirements of the United States and California Constitutions, those procedures are a courtesy only, and not an acknowledgement of any claim that this Division creates any "vested" right.

(4) Upon receipt of the Notice of Appeal, the Airport Director shall promptly take the following actions:

(i) The Airport Director shall review the Notice of Appeal and its contents and determine whether to (a) grant the relief requested in the Notice of Appeal; (b) modify the violation; or (c) uphold the violation and refer the matter to the Airport Noise Violation Committee for hearing, if a hearing has been requested on the matter; and

(ii) The Airport Director shall give written notice to the person requesting review of his decisions and determinations not later than forty-five (45) days after his receipt of the Notice of Appeal.

(e) *Referral To The Airport Noise Violation Committee.* If the Airport Director determines that the County should refer the Notice of Appeal, in whole or in part, to the Airport Noise Violation Committee, pursuant to Section 2-1-30.13(d)(4)(i)(c), then, within thirty (30) days of the Committee's receipt of the Notice of Appeal, the Committee shall give written notice to the party requesting review of the date of the hearing at which the matter will be heard. In selecting the date for the hearing by the Airport Noise Violation Committee, the Committee shall seek to obtain the most expeditious review of the issues possible, taking into consideration the rights of the parties to a fair adjudication of the issues.

(f) *Hearing.*

(1) *Rules of evidence.* The hearing need not be conducted according to the technical rules relating to evidence set forth in the California Evidence Code. Any relevant evidence shall be admitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of such evidence over objection in civil actions. The rules of privilege shall be effective to the same extent that they are recognized in civil actions and irrelevant and unduly repetitious evidence may be excluded by the Airport Noise Violation Committee.

(2) *Determination.* The Airport Noise Violation Committee shall determine, based upon all the evidence presented, whether said Notice of Violation and/or the penalty or sanction imposed should be upheld or revoked. The decision shall be supported by appropriate findings on all material issues raised at the hearing.

(g) *Decision.*

(1) Written notice of the Airport Noise Violation Committee's decision on the Notice of Appeal shall be given to the party filing the Notice and all other interested parties within thirty (30) days after the date of the hearing.

(2) The decision of the Airport Noise Violation Committee is final and binding on all parties.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 00-1, § 7, 2-1-00; Ord. No. 04-016, § 27, 9-9-04)

Sec. 2-1-30.15, 2-1-30.16. Reserved.

Sec. 2-1-31 – 2-1-39. Reserved.

Excerpt from Orange County Codified Ordinances: Title 1 – Government and Administration, Division 1 – General Provisions, Article 2 – Violations and Use of Citation

Sec. 1-1-34. General penalty for violations.

(a) Any person violating any of the provisions of this Code shall, unless otherwise specifically provided in this Code or by statute, be guilty of a misdemeanor.

(b) Any person convicted of a misdemeanor for a violation of any of the provisions of this Code shall, unless otherwise specifically provided in this Code or by statute, be punishable by a fine of not more than one thousand dollars ($1,000.00) or by imprisonment in the County Jail for a period of not more than six (6) months or by both such fine and imprisonment.

(Code 1961, §§ 11.021; Ord. No. 3001, § 1, 8-30-77; Ord. No. 3032, § 1, 1-17-78; Ord. No. 3985, § 1, 7-22-97)

Editor's note: Ord. No. 00-1, §§ 8 and 9, adopted February 1, 2000, amended the Code by repealing former §§ 2-1-30.15 and 2-1-30.16 in their entirety. Former § 2-1-30.15 pertained to enforcement, and former § 2-1-30.16 pertained to education, transition or modification periods. Both sections derived from Ord. No. 3642, adopted June 16, 1987.

station; or (ii) arrivals between the hours of 11:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays) (local time), as measured at any John Wayne Airport noise monitoring station.

(d) *Scheduled Departure Time Prohibition.* No commercial airline aircraft shall publish or advertise a scheduled departure time for any flight originating from John Wayne Airport which is: (i) prior to 6:45 a.m. or after 9:45 p.m. (local time) Monday through Saturday; or (ii) before 7:45 a.m. or after 9:45 p.m. (local time) Sunday. For purposes of this subsection, "scheduled departure time" shall mean the time at which a commercial aircraft is scheduled by its operator to depart from the passenger terminal gate. If the operator is a commuter carrier which has been authorized by the Airport Director to conduct operations from a fixed base operator ("FBO"), scheduled departure time shall mean the time when the aircraft is scheduled to depart the FBO location for departure operations. In light of current passenger airline practices, it is presumed, for the purposes of this Division, that the scheduled departure time is the departure time published by the operator in the Official Airline Guide and computer reservation databases.

(e) Any person conducting air service at John Wayne Airport is deemed conclusively to have accepted all terms and conditions of this Division of the County's Ordinances and of the terms and conditions of the Phase 2 Commercial Airline Access Plan and Regulation. In addition, the terms of any lease or operating agreement with an airline require the airline to conduct all operations and activities at John Wayne Airport in strict compliance with this Division and with the Phase 2 Commercial Airline Access Plan and Regulation. In addition to the enforcement remedies provided for in Section 2-1-30.14, violation of the noise or operating limitations of this Section shall be cause for termination of the passenger airline lease or operating agreement by the County of Orange against such operator and shall be subject to the penalties and/or fines set forth in Section 8 of the Phase 2 Commercial Airline Access Plan and Regulation.

((Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 00-1, § 3, 2-1-00; Ord. No. 04-016, § 18, 9-9-04)

Sec. 2-1-30.5. General aviation operations.

(a) No person shall operate any general aviation aircraft at John Wayne Airport if it generates a SENEL level, as measured at John Wayne Airport NMS 1S, NMS 2S, or NMS 3S, on takeoff or landing, which is greater than the following SENEL values:

NMS 1S	101.8 dB
NMS 2S	101.1 dB
NMS 3S	100.7 dB

(b) *Curfew.*

(1) No person shall operate any general aviation aircraft at night at John Wayne Airport if it generates a SENEL level at any of the following respective noise monitoring stations, either on takeoff or landing, which is greater than the following SENEL values:

NMS 1S	86.8 dB
NMS 2S	86.9 dB
NMS 3S	86.0 dB
NMS 4S	86.0 dB
NMS 5S	86.0 dB
NMS 6S	86.0 dB
NMS 7S	86.0 dB
NMS 8N	86.0 dB
NMS 9N	86.0 dB
NMS 10N	86.0 dB

For purposes of this Section, general aviation aircraft operations at night shall mean departures between the hours of 10:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays) (local time), as measured at any John Wayne Airport noise monitoring station, and arrivals between the hours of 11:00 p.m. and 7:00 a.m. (8:00 a.m. on Sundays) (local time), as measured at any John Wayne Airport noise monitoring station.

(c) The location of the noise monitoring stations shall be as set forth in the John Wayne Airport Regulations.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 00-1, § 4, 2-1-00; Ord. No. 04-016, § 19, 9-9-04)

Sec. 2-1-30.6. General exemption.

The following categories of aircraft shall be exempt from the provisions of Sections 2-1-30.4 and 2-1-30.5:

(a) Aircraft operated by the United States of America or the State of California;

(b) Law enforcement, emergency, fire or rescue aircraft operated by any county or city of said state;

(c) Aircraft used for emergency purposes during an emergency which has been officially proclaimed by competent authority pursuant to the laws of the United States, said State, or the County;

(d) Civil Air Patrol aircraft when engaged in actual search and rescue missions;

(e) Aircraft engaged in arrival(s) or departure(s) while conducting tests under the direction of the Airport Director in an attempt to rebut the presumption of aircraft noise violation pursuant to the provisions of Section 2-1-30.7 or 2-1-30.9;

(f) Emergency aircraft flights for medical purposes by persons who provide emergency medical care, provided written information concerning dire emergency is submitted to the Airport Director for all emergency aircraft flights within seventy-two (72) hours prior to or subsequent to the departure or arrival of the aircraft. It is intended that the exemption provided for in this subparagraph shall have the same meaning and be interpreted consistent with, and to the same extent as Public Utilities Code Section 21662.4 as enacted or as it may be amended.

(Ord. No. 3642, § 1, 6-16-87; Ord. No. 3793, § 2, 9-11-90; Ord. No. 04-016, § 20, 9-9-04)

Sec. 2-1-30.7. Presumption of aircraft noise violation.

(a) In the event that the Airport Director determines in his reasonable discretion that available published noise measurements or historical noise data gathered and maintained by John Wayne Airport, for a particular type or class of aircraft, indicate that it cannot meet the noise levels set forth in Section 2-1-30.4 or 2-1-30.5, it shall be presumed that operation of such aircraft will result in a continued violation of the provisions of Section 2-1-30.4 or 2-1-30.5, and any aircraft of such particular type or class will not be permitted to arrive at, tie down on, be based at or depart from John Wayne Airport, except in dire emergencies for the preservation of life or property; provided, however, that the owner or operator of such aircraft shall be entitled to rebut such presumption to the reasonable satisfaction of the Airport Director by furnishing evidence to the contrary.

(b) The Airport Director shall attempt to notify all aeronautical users of the list of aircraft not permitted to operate at John Wayne Airport by means including, but not limited to, notification to the Federal Aviation Administration, business and general aviation organizations and John Wayne Airport fixed base operators.

(c) In the event any specific aircraft of the type or class of aircraft not excluded at John Wayne Airport under subsection (a) generates SENEL levels in violation of the levels set forth in Section 2-1-30.4 or 2-1-30.5 of this article, it shall be presumed that operation of such aircraft will result in a continued violation of the provisions of Section 2-1-30.4 or 2-1-30.5 and such aircraft will not be permitted to arrive at, tie-down, be based at, or depart from John Wayne Airport; provided, however, that the owner or operator of such aircraft shall be entitled to rebut such presumption to the reasonable satisfaction of the

FAA WKG TOGETHER.

Newport Beach City Councilwoman
Leslie Daigle

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News

New JWA flight path may lessen noise

Eastbluff residents should hear fewer loud airplanes under revised procedure, airport says.

Published April 06, 2010
The Daily Pilot
By Mike Reicher

Starting Thursday, some planes taking off from John Wayne Airport will fly about a football field's distance west of their current route, if the Federal Aviation Administration's new flight procedure works as intended.

The FAA changed the route after discovering that a worker had incorrectly entered the altitude where planes are required to turn — a "minor charting error" — an FAA spokesman said.

The revised changes should make the flights slightly less noisy for residents on the east side of Upper Newport Bay, while the general flying public probably won't notice a change.

Ian Gregor, a spokesman for the FAA, said that when the flight path was last modified in September it caused some planes to turn early and fly over homes in the Eastbluff community.

"The altitude shouldn't have been there," he said. "We wanted them to go down the middle of Back Bay."

Gregor added that the error wasn't dangerous, though, because it applied only to departing planes heading in the same direction. Ultimately, planes will turn about a second later and will fly closer to the center of the bay, he said, after the new flight path takes effect.

Eastbluff residents had complained to city officials about increased noise.

John "Jock" Marlo III, president of the Eastbluff Homeowners Assn., said his neighbors complained about loud planes right away.

"They noticed it significantly. It appeared they were coming more and more toward our direction," he said.

After the Eastbluff board brought the issue to the attention of the city, airport and FAA officials joined the discussion. The human error was recognized, Gregor said, and the FAA made an adjustment to the flight procedure. Along the way, activist groups had also complained about the new procedure.

Last week a group of more than 20 officials met to discuss the problem, including representatives from Newport Beach, Costa Mesa, JWA, the FAA and others.

"The FAA was more than cordial and the airport has been equally helpful," Newport Councilwoman Leslie Daigle, who chairs the Citizens Aviation Committee, said in an e-mail. She also represents the district that includes Eastbluff.

News Archive

Contact

Councilwoman
Leslie Daigle

City of Newport Beach
3300 Newport Blvd
Newport Beach, CA
92663

Phone: (949) 838-5603

John Wayne Airport

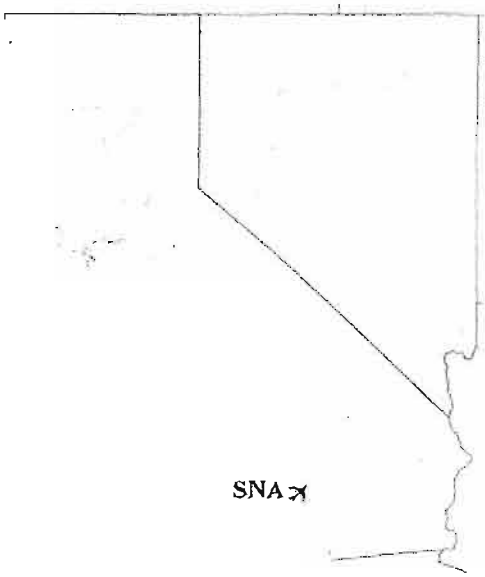
From Wikipedia, the free encyclopedia

John Wayne Airport (IATA: **SNA**, ICAO: **KSNA**, FAA LID: **SNA**) is an airport in an unincorporated area in Orange County, California, with its mailing address in the city of Santa Ana, which is also the county seat, hence the International Air Transport Association (IATA) airport code. The main entrance to the airport is off of MacArthur Blvd in Irvine, the city that abuts the airport from the north and east. Newport Beach and Costa Mesa form the southern and western boundaries, respectively, together with a small unincorporated area along the Coronoa del Mar (73) Freeway. Santa Ana lies just north, not actually touching the airport directly. Originally named **Orange County Airport**, the county Board of Supervisors renamed it in 1979 to honor the actor John Wayne, who resided in neighboring Newport Beach and died that year. It also became the first airport to be named after an entertainer.[3]

The main runway, at 5,701 feet (1,738 m), is one of the shortest of any major airport in the United States, resulting in most passenger aircraft operating from the airport to be no larger than the Boeing 757. However, some larger cargo aircraft, such as the FedEx A310/300, fly from SNA. Some gates are built to handle planes up to the size of a Boeing 767, which can operate with payload/fuel load restrictions. No wide-body passenger aircraft are currently in scheduled service at the airport.

John Wayne Airport

IATA: SNA – ICAO: KSNA – FAA LID: SNA



Location of the John Wayne Airport

Summary	
Airport type	Public
Owner/Operator	Orange County
Serves	Orange County, California
Location	Santa Ana, California
Elevation AMSL	56 ft / 17 m
Coordinates	33°40′32″N 117°52′06″W
Website	www.ocair.com (http://www.ocair.com)

Runways		
Direction	**Length**	**Surface**

John Wayne Airport is the sole commercial airport within Orange County. General aviation operations outnumber commercial operations and several facilities at the airport serve the general aviation and corporate aviation community. The other general aviation airport within the county is Fullerton Municipal Airport. Other commercial airports within close proximity are Long Beach Airport, followed by Los Angeles International Airport and LA/Ontario International Airport. In 2008, John Wayne Airport was the second busiest airport in the area (by passenger count) with almost 9 million total passengers.[4]

	ft	m	
1L/19R	5,701	1,738	Asphalt
1R/19L	2,887	880	Asphalt

Statistics (2008)

Total aircraft operations	267,751
GA operations	172,822
Passenger volume	8,989,603
Cargo tonnage (til Nov '08)	17,383

Sources: FAA,[1] Airport website.[2]

The largest airlines at John Wayne Airport are Southwest Airlines, United Airlines, American Airlines, and Alaska Airlines.[5]

John Wayne Airport Runway

John Wayne Airport is 14 miles (23 km) from Orange County's signature attraction - the Disneyland Resort. By contrast, Los Angeles International Airport is 35 miles (56 km) from Disneyland.

A statue of the airport's namesake welcomes passengers passing through the arrivals area on the lower level.[6]

Contents

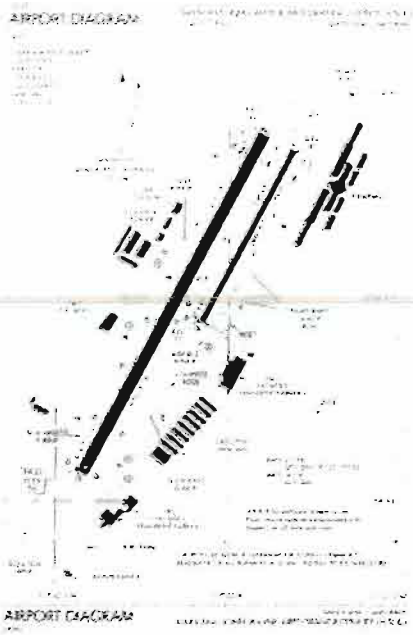
History

The first airstrip on the grounds was constructed in 1923, when Eddie Martin founded a flying school on land owned by the Irvine Company. It was purchased through a land swap by the County of Orange in 1939 and remains under the County's ownership and management.

After serving as a military base during World War II, it was returned by the federal government to the County with the stipulation that it remain open to all kinds of aviation uses.

During the 1950s the only airline flights were Bonanza's few flights between Los Angeles and Phoenix, via San Diego. In 1963 Bonanza started nonstop F27s to Phoenix, and to Las Vegas in 1965; in 1967 Air California started Electras nonstop to San Francisco, 48 flights a week each way. The first scheduled jet flights were Bonanza DC-9s later in 1967.

In 1967, the 22,000-square-foot (2,000 m^2) Eddie Martin Terminal was constructed to accommodate 400,000 annual passengers. Remodeling added two passenger holding areas in 1974, a new baggage claim area in 1980 and a terminal annex building in 1982, bringing the facility to 29,000 square feet (2,700 m^2).



FAA diagram of John Wayne Airport (SNA)

Nonstop flights reached Salt Lake City in 1976-77 (Hughes DC9s), Denver in 1982 (Frontier MD80s), Dallas-FtWorth in 1983 (American MD80s), Chicago in 1986 (AirCal 737-300s), and New York Kennedy in 1991 (America West 757s).

After the Orange County Airport was renamed the John Wayne Airport in 1979, Arrival and Departure Monitors in airports throughout the country continued to identify the airport as Orange County, which is the nickname for the OMB Metropolitan Designation, Santa Ana-Anaheim-Irvine, California. To commemorate the Airport's namesake, the John Wayne Associates commissioned sculptor Robert Summers to create nine-foot bronze statue of "the Duke." The nine-foot statue, created at Hoka Hey Foundry in Dublin, Texas, was dedicated to the County on November 4, 1982. Today, the bronze statue is located in the Thomas F. Riley Terminal on the Arrival Level.

In 1990, the Thomas F. Riley Terminal opened to the public. The aging 29,000-square-foot (2,700 m^2) Eddie Martin Terminal was replaced with a modern 337,900-square-foot (31,390 m^2) facility. The new facility included 14 loading bridges, four baggage carousels, wide open spaces and distinct roadside arrival and departure levels. In 1994, the then-unused Eddie Martin Terminal was then demolished.

In the late 1990s and early 2000s, a new, larger airport was proposed for the nearby site of the then recently closed El Toro Marine Corps Air Station. However, after a series of political battles, combined with significant opposition from residents in the vicinity of El Toro, the proposal was defeated, and no new airport was built.

In 2004, Chris Norby, a member of the county Board of Supervisors, proposed changing the airport's name to *The O.C. Airport, John Wayne Field*, in light of the popularity of the TV series *The O.C.* He withdrew the idea after receiving negative publicity and angry responses from numerous local residents.

On March 31, 2008, Aloha Airlines, which began air service to the Hawaiian Islands in 2001, ended all of its passenger operations at the airport.[7] This has left a void in air service, nonstop from SNA, to Hawaii, a popular tourist destination for Southern California residents.

As a result of Aloha Airline's pullout and fleet reductions within American Airlines, United Airlines, and Continental Airlines, the airport considered opening up two slots as of June 7, 2008. According to Orange County's local newspaper, *The Orange County Register*, the top two candidates for the slots were Air Canada and Hawaiian Airlines[*citation needed*]. An Air Canada spokesperson said that the airline was not in a position at the time to make a decision.[8] A Hawaiian Airlines spokesperson said that, although it had an interest in operating from John Wayne Airport, it was most likely that it would not take the slot since it was trying to concentrate on its routes from the nearby Los Angeles International Airport. Furthermore, Hawaiian Airlines primarily flies Boeing 767 aircraft, which the current airport facilities could only accommodate with payload/fuel load restrictions.

On April 29, 2009, Virgin America began service between San Francisco and Orange County. The service directly competed with both Southwest Airlines and United Express. The airline ended service to San Francisco 13 months later, on May 26, 2010.[9]

On October 7, 2009, Continental Airlines announced it would begin daily service to Honolulu on March 7, 2010, and Maui[10] using the Boeing 737-700. The services are currently operating on a seasonal basis.

On April 9, 2010, Air Canada began operating flights to Toronto—at that time the only international flights to and from Orange County. This service only lasted until October 29.[11] After Air Canada terminated the route, WestJet announced plans to enter service to **John Wayne Airport** from Vancouver and Calgary starting on May 2, 2011.[12]

In July 2010, the airport began offering free Wi-Fi internet to passengers.[13]

The airport used to be a focus city for Aloha Airlines and a hub for Air California.[*citation needed*]

Airfield information

John Wayne Airport covers 500.82 acres (2.0267 km^2) of land. The airport has multiple general aviation facilities, a main commercial airline building split into two terminal areas, and 2 paved runways.

- Runway 1L/19R: 5,701 x 150 ft (46 m). (1,738 x 46 m), Commercial Aircraft, General Aviation serving most incoming and departing traffic to the west of the airport. ILS equipped.
- Runway 1R/19L: 2,887 x 75 ft (23 m). (880 x 23 m), General Aviation, Light Aircraft

John Wayne viewed from the south in 2009.

Aircraft noise abatement and curfew

Main article: Aircraft noise

A 1985 settlement agreement defined the scope of operation for John Wayne Airport in how it affects the

local community. The area that lies directly South of John Wayne Airport is considered a noise sensitive area. The agreement in conjunction with a Phase 2 Commercial Airline Access Plan and Regulation controls the number of noisier operations (mainly commercial aircraft) allowed from the airport. Noise abatement enforcement is carried out with the aid of 10 permanent noise monitoring stations. These stations are placed in areas that exceed a Community Noise Equivalent Level (CNEL) of 65 dB.

The short primary runway (19R/1L), coupled with the local noise restrictions, can require a takeoff at or near full power (95-97% power). Some aircraft departing from the airport may cycle to full power while holding at the runway then release the brakes when engines are fully spooled up. On operations from runway 19R a steep climb may also be required to allow for a power reduction at about 500–700 feet for a quieter overflight over the city of Newport Beach. For 19R departures a left turn after departure to 175 degrees allows for a passage over Newport Beach within the confines of the noise abatement profile. Departures from 1L (normally during Santa Ana wind conditions) are not affected by these noise abatement procedures. Landings almost always include the use of reverse thrust.

The County prohibits commercial departures between 10:00PM and 7:00AM (8:00AM on Sundays) and commercial arrivals between 11:00PM and 7:00AM (8:00AM on Sundays). Exceptions can be made for an emergency, mechanical, air traffic control or weather delay, which is beyond the control of the airline.

In 2003, the settlement agreement was amended to increase operations, but focused on increases only for aircraft meeting the lowest noise signatures.

Access and noise reports are published by the airport and are available to the public. These reports are generated on a regular basis and outline curfew exceptions per carrier and overall noise impact.[14]

Terminals, airlines and destinations

Terminals

The main passenger terminal, the Thomas F. Riley Terminal, is named for the late County Supervisor who lobbied for the airport's expansion in the 1980s. The Thomas F. Riley Terminal is divided into two terminal areas, A and B, with temporary satellite buildings serving commuter flights. The Southern side of terminal B will be expanded to allow for six more bridged aircraft gates. Once complete, the temporary satellite buildings will be removed and more permanent facilities for commuter flights will be in place. The improvements are allowed under amendments added in 2003 to the 1985 settlement agreement with the local community.

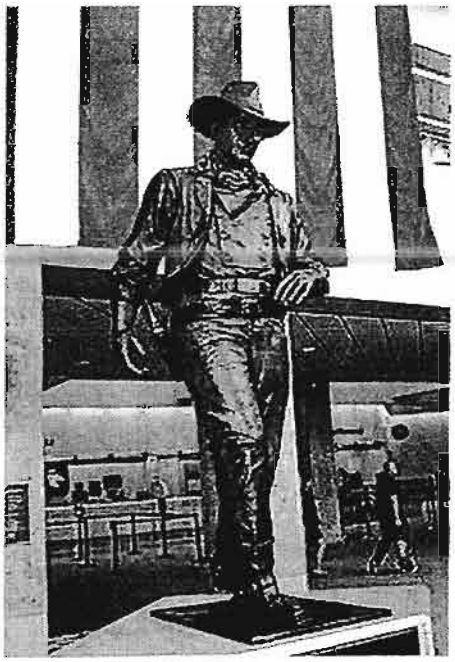
Terminal A and B are both within the same Thomas F. Riley building and security screened passengers can move between both terminal areas. Security screening lanes exist in both terminal areas right next to check in. Both security screening areas also have a "Fast Track" lane for first class and elite frequent fliers.

Both Terminal A and B contain restaurants, bars and shops, with a themed restaurant located in the air side connecting area of both terminals. In the upper rotunda above the themed restaurant is an American Airlines Admirals Club (operating out of Terminal A) and a United Airlines Red Carpet Club (operating out of Terminal B).

Four baggage claim belts are in the arrivals area, two on the Terminal A side and two on the Terminal B side. Immediately outside the baggage claim is the curbside arrivals pickup area. Rental car offices are in between both baggage claim areas with most rental agencies on site in the lower levels of the parking facility across the arrivals pickup area. Across the roadway from the arrivals pickup area is an island for public

transportation including taxis, buses and the Disneyland Resort Express.

Airlines	Destinations	Terminal
Alaska Airlines	Portland (OR), Seattle/Tacoma	A
American Airlines	Chicago-O'Hare, Dallas/Fort Worth	A
Continental Airlines	Houston-Intercontinental, Newark **Seasonal:** Honolulu, Kahului	A
Delta Air Lines	Atlanta, Las Vegas, Minneapolis/St. Paul, Salt Lake City	A
Delta Connection operated by SkyWest Airlines	Salt Lake City	A
Frontier Airlines	Denver	B
Southwest Airlines	Chicago-Midway, Denver, Las Vegas, Oakland, Phoenix, Sacramento, San Francisco, San Jose (CA)	B
United Airlines	Chicago-O'Hare, Denver, San Francisco	B
United Express operated by SkyWest Airlines	San Francisco, Denver	B
US Airways	Phoenix	B
US Airways Express operated by Mesa Airlines	Phoenix	B
WestJet	Calgary [begins June 13], Vancouver [begins May 2][15]	A



Statue of John Wayne at John Wayne Airport

A United Airlines 757 at John Wayne Airport in March 2007

Cargo Carriers

Airlines	Destinations

FedEx Express	Memphis, Oakland
UPS Airlines	Louisville, Phoenix

International service

Orange County was previously served by Alaska Airlines to Vancouver which was dropped in 2002 after limited service due to INS rescreening procedures. Flights from most Canadian airports are pre-screened by US authorities present in Canadian airports and arrive in the US into domestic gates, but Customs and Border Protection requests that agents are present in the arriving airport in case a passenger from a pre-cleared flight needs further processing. Between April and October 2010, Air Canada flew from Toronto. On January 26, 2011, WestJet announced new services to Vancouver and Calgary beginning in May and June respectively.

Two gates in the revamped existing terminal will be able to support international arrivals from non pre-screened locations. This will open the airport to flights from Mexico and possibly Central American countries where the runway length and aircraft provides sufficient nonstop range.

Ground Transporation

The airport is served by OCTA buses #76 and #212, as well as the Irvine Shuttle (http://www.irvineshuttle.net/) route A.

Taxi's and private shuttles are also available from the Ground Transportation Center located outside the lower level between Terminal A and B.

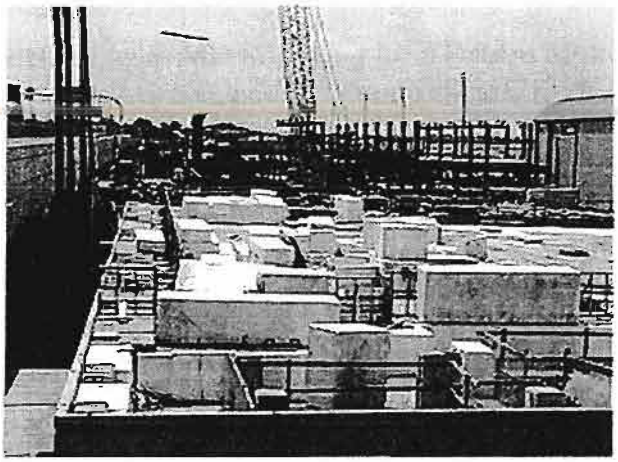
The Disneyland Resort Express provides regular service from the airport to Disneyland Resort and Anaheim Resort Hotels.

On site car rentals are available in the basement level of the Parking A2/B2 garages. Off site car rental shuttles are available at the Ground Transportation Center.

Improvement program

The County of Orange approved the JWA Improvement Program [1] (http://ocair.com/improvements /default.htm) to increase the terminal size and accommodate six additional bridged gates with six commuter slots. An extension to the South of the current Terminal B will house the new bridged passenger boarding gates to be called Terminal C. Three new baggage claim carousels will be built in the arrivals area of Terminal C. A new central plant with power generation and cooling systems will also be part of the improvement project.

New Terminal Layout


Terminal C Under Construction, April 2010

In order to make room for the new terminal C, existing parking garage B1 was deconstructed and removed in 2009.[16] A replacement parking garage was completed in late 2010 and will open when Terminal C is completed. Additionally general improvements are being made to the existing Terminal A and B facilities. The improvements are part of a multi-year program that is to be completed in stages allowing for continual operation and minimal disruption to the airport.

Temporary regional jet facilities were added to both the Terminal A and B ground level areas. Both facilities accommodate 2 gate areas and can be used for regional jet and regular commercial aircraft via air stair boarding. Both facilities are accessed from the outside doorway one level below at each end of the terminal. As part of the Airport Improvement Program, permanent commuter holdroom facilities are being constructed creating North and South Commuter holdrooms.

Terminals A and B in the Riley Terminal will also be renovated to match the new Terminal C. All jet bridges will be replaced in the existing terminals and a new baggage system will also be introduced. Two gates in the existing terminal will be modified to handle international arrivals requiring Customs and Border Protection Processing (CBP). Flights from Canada go through US CBP processing in Canada however local CBP presence is required for any contingencies, formal CBP processing at John Wayne Airport is to support destinations such as Mexico.

Construction of the Improvement Program is underway. The existing Remain-Over-Night location for commercial aircraft has been relocated[17] and is being used as temporary public vehicle parking lot C. The new parking structure C has nearly completed construction and expected to be complete in late 2010, but it is expected to open in 2011 along with the new terminal C. The new central plant will be operational in late 2010. Terminal C is expected to be completed by Summer 2011 and ready for use in late 2011.[18]

Aircraft incidents

On February 17, 1981, Air California (AirCal) Flight 336 (a Boeing 737-200), flying from San Jose, California, to John Wayne Airport, crashed upon initiating a go-around. The crew was cleared for a visual approach to Runway 19R while the controller had cleared another flight to take off from 19R. Upon realizing the mistake, the controller ordered Air California 336 to go around and the other aircraft to abort its takeoff, which it did. The captain of the landing Air California aircraft delayed the go-around then initiated a

14. ^ John Wayne Airport (SNA) Quarterly Noise Abatement Reports (http://www.ocair.com/newsandfacts/NoiseReports.htm)
15. ^ Introducing our summer schedule with non-stop to Orange County - Anaheim, California (http://www.westjet.com/guest/en/deals/offers/summer-schedule.shtml)
16. ^ http://www.ocair.com/Improvements/Projects/B1.htm
17. ^ http://www.ocair.com/Improvements/Projects/SRON.htm
18. ^ JWA Improvement Program website | www.ocair.com/improvements
19. ^ "FAA Incident Report - Air California N486AC - Feb 17th, 1981" (http://www.ntsb.gov/ntsb/brief.asp?ev_id=28258&key=0). FAA. 1981. http://www.ntsb.gov/ntsb/brief.asp?ev_id=28258&key=0.
20. ^ "FAA Incident Report - Israel Aircraft Industries LAX94FA073 - Dec 15th, 1993" (http://www.ntsb.gov/ntsb/brief2.asp?ev_id=20001211X13867&ntsbno=LAX94FA073&akey=1). FAA. 1993. http://www.ntsb.gov/ntsb/brief2.asp?ev_id=20001211X13867&ntsbno=LAX94FA073&akey=1.

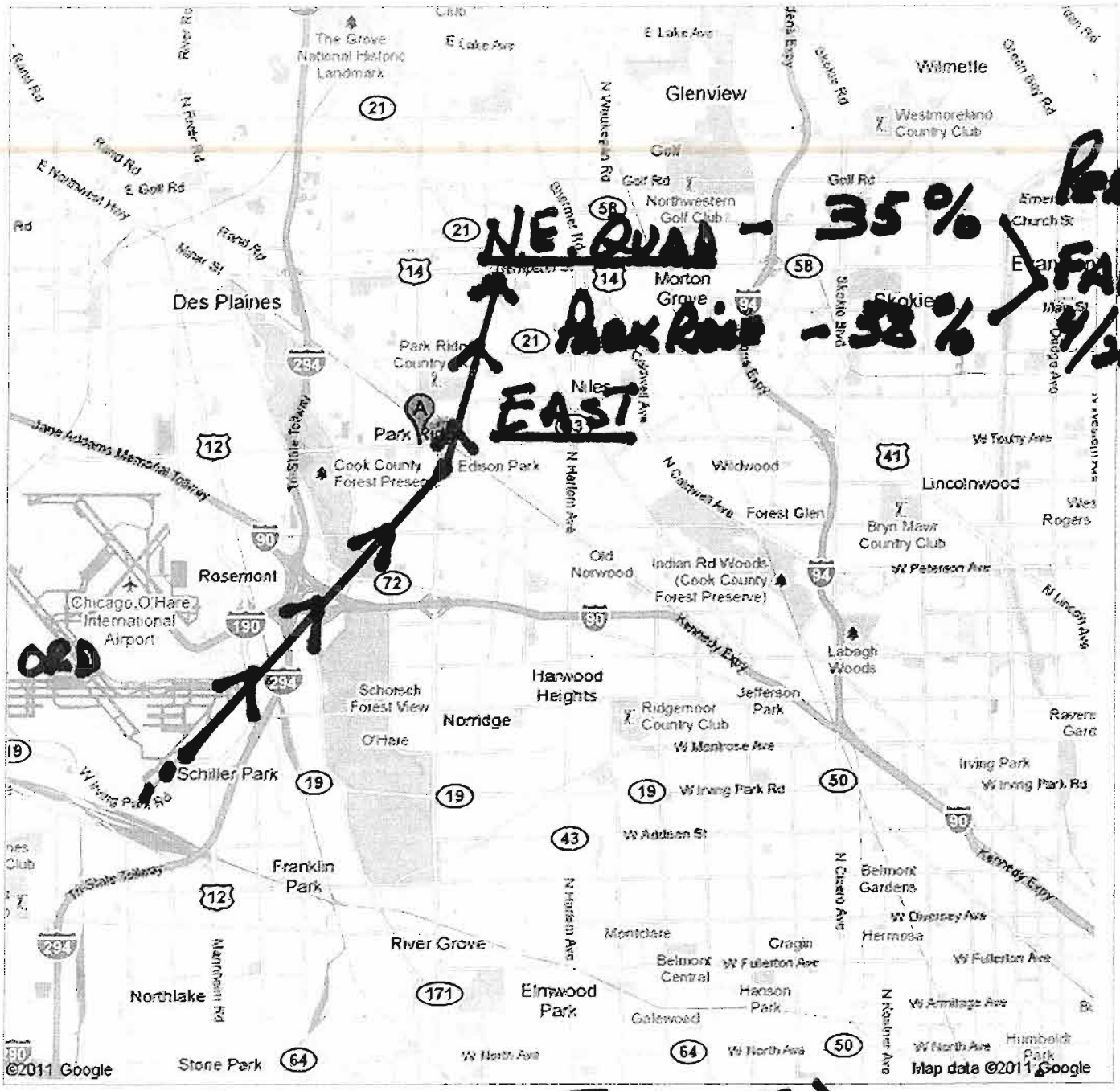
External links

- Official website (http://www.ocair.com)
- John Wayne Airport Improvement Program (http://www.ocair.com/Improvements/) (official site)
- John Wayne Airport Settlement Information (http://www.ocair.com/aboutJWA/settlement_agreement.htm/)
- FAA Airport Diagram (http://naco.faa.gov/d-tpp/1104/00377AD.PDF) (PDF), effective 07 April 2011
- Orange County Sheriff's Department John Wayne Airport Police Services (http://www.ocsd.org/Operations/Airport.asp)
- Resources for this airport:
  - AirNav airport information for KSNA (http://www.airnav.com/airport/KSNA)
  - ASN accident history for SNA (http://aviation-safety.net/database/airport/airport.php?id=SNA)
  - FlightAware airport information (http://flightaware.com/resources/airport/KSNA) and live flight tracker (http://flightaware.com/live/airport/KSNA)
  - NOAA/NWS latest weather observations (http://www.crh.noaa.gov/data/obhistory/KSNA.html)
  - SkyVector aeronautical chart for KSNA (http://skyvector.com/perl/code?id=KSNA&scale=2)
  - FAA current SNA delay information (http://www.fly.faa.gov/flyfaa/flyfaaindex.jsp?ARPT=SNA&p=0)

Retrieved from "http://en.wikipedia.org/wiki/John_Wayne_Airport"
Categories: USAAF Gulf Coast Training Center | Airports in the Greater Los Angeles Area | Buildings and structures in Santa Ana, California | Geography of Santa Ana, California | Airports in Orange County, California | Airfields of the United States Army Air Forces in California | Transportation in Santa Ana, California

Marked Map of Night time routes over the city of Park Ridge with FAA stated percentages of flights programmed for the East and N.E. Quadrant.

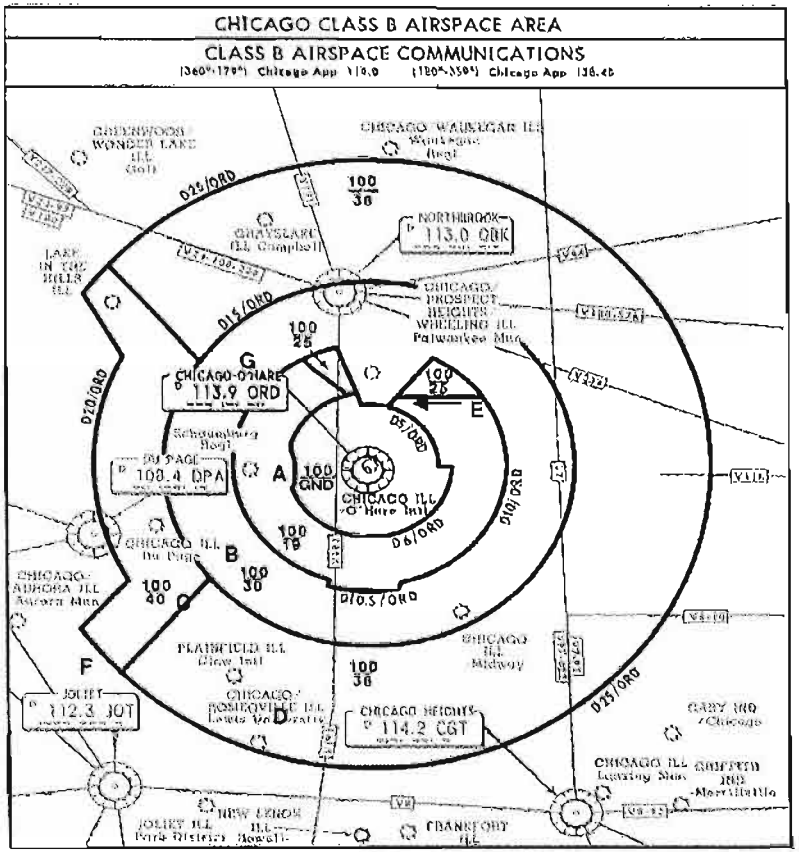
Google maps Address **Park Ridge, IL**



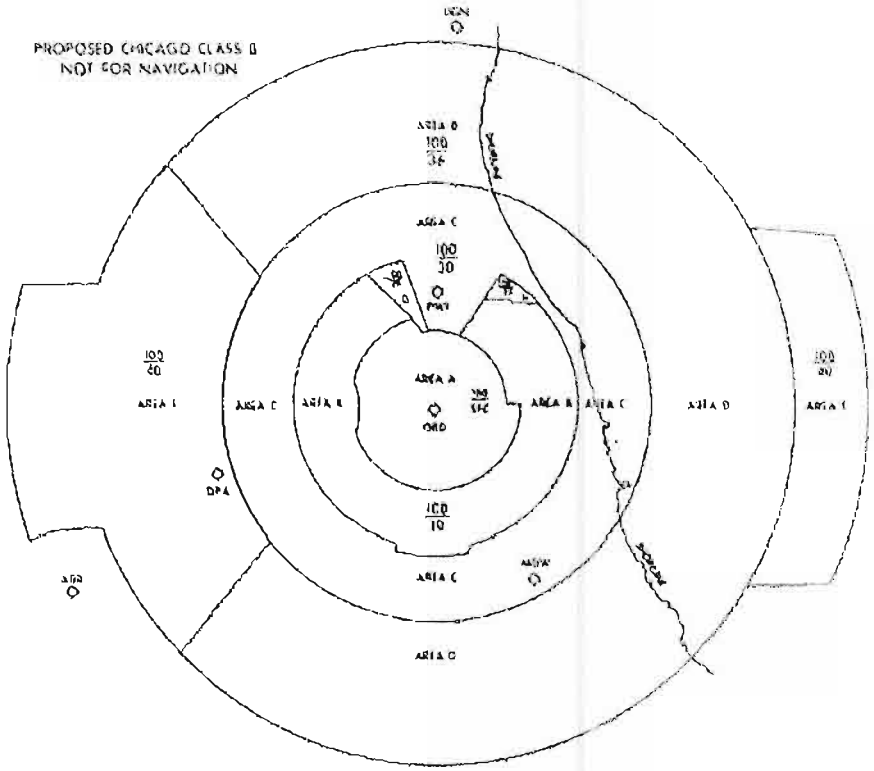
(Night Time Take offs)

Chicago Class B Airspace Changes Eff. October 21, 2010

- New Area E to the East over Lake Michigan between 25 and 30 nm range ring of ORD
- Area F to the West expanded out to 30 nm range ring of ORD
- Area G expanded south to 5 nm range ring of ORD
- New Area G (old E) does not extend as far south



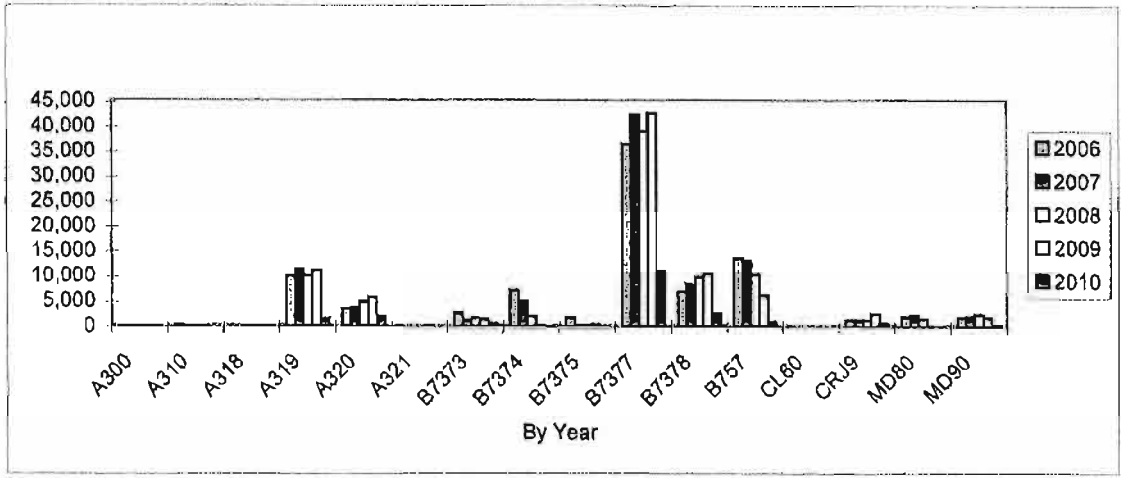
Expires 10/21/10



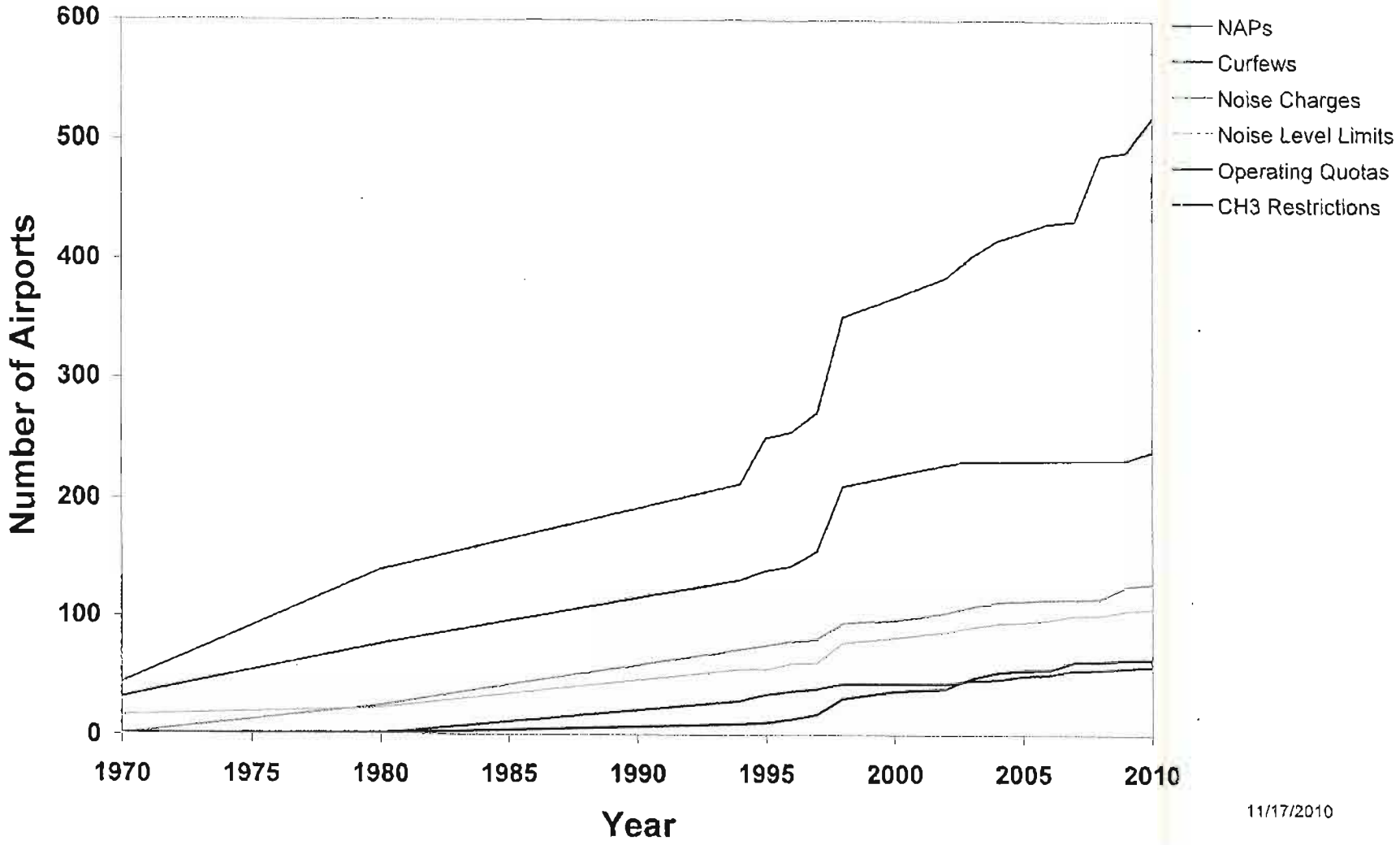
New 10/21/10

CL60		2			
CRJ9	1,325	1,301	1,224	2,533	673
MD80	1,981	2,185	1,463	10	
MD90	1,841	2,047	2,459	1,745	232

FIGURE 5
AIRCRAFT OPERATIONAL HISTORY



Growth in Airport Noise Restrictions



11/17/2010

O'HARE - ORD

O'HARE FIVE DEPARTURE

DEPARTURE ROUTE DESCRIPTION

ALL AIRCRAFT: Expect radar vectors to first enroute navaid/fix. Expect clearance to requested altitude/flight level ten minutes after departure.
ALL DME EQUIPPED AIRCRAFT: Cross 5 DME arc of ORD at or above 3000 feet MSL, cross 8 DME arc of ORD at or above 4000 feet, maintain 5000 feet or assigned altitude. If unable to comply advise ATC as soon as possible prior to departure.
NON-DME PROCEDURES: Aircraft initially assigned heading 120° CW 220°, cross DPA R-093 at or above 4000, maintain 5000 or assigned altitude. If unable to comply advise ATC as soon as possible prior to departure.

TAKE-OFF MINIMUMS:
Rwys 4L/R, 9L/R, 10, 14L/R, 22L/R, 32R, Standard.
Rwy 27L, Standard with minimum climb of 220 feet per NM to 1700.
Rwy 27R, Standard with minimum climb of 228 feet per NM to 1800.
Rwy 28, Standard with minimum climb of 222 feet per NM to 1700.
Rwy 32L, Standard with minimum climb of 240 feet per NM to 1800.

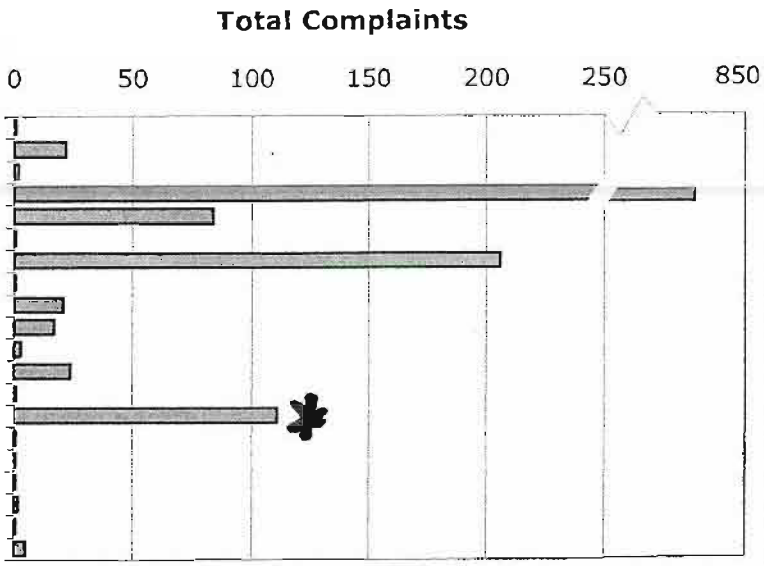
TAKE-OFF OBSTACLES:
Rwy 4L: Buildings beginning 3302' from DER, 1198' right of centerline, up to 109' AGL/751' MSL.
Rwy 4R: Tree 810' from DER, 611' right of centerline, 36' AGL/675' MSL. Trees beginning 2149' from DER, 834' left of centerline, up to 100' AGL/749' MSL. Parked aircraft on ramp 153' from DER, 329' left of centerline, 80' AGL/735' MSL.
Rwy 9L: Building 2771' from DER, 1234' right of centerline, 94' AGL/745' MSL.
Rwy 9R: Street light 877' from DER, 689' right of centerline, 40' AGL/673' MSL. Tree 3492' from DER, 1054' left of centerline, 100' AGL/744' MSL.
Rwy 10: Parked aircraft on ramp 33' from DER, 440' left of centerline, 80' AGL/735' MSL. Parked aircraft on ramp 940' from DER, 641' left of centerline, 80' AGL/735' MSL. Towers beginning 2522' from DER, 983' right of centerline, up to 127' AGL/771' MSL.
Rwy 14L: Light poles beginning 981' from DER, 745' left of centerline, up to 40' AGL/684' MSL. Parked aircraft on ramp 100' from DER, 363' right of centerline, 80' AGL/729' MSL. Sign 1292' from DER, 724' right of centerline, 37' AGL/682' MSL.
Rwy 14R: Parked aircraft on ramp 1104' from DER, 766' right of centerline, 80' AGL 736' MSL.
Rwy 22R: Parked aircraft on ramp 34' from DER, 430' left of centerline, 80' AGL/736' MSL.
Rwy 27L: Parked aircraft on ramp 70' from DER, 408' left of centerline, 80' AGL/740' MSL. Rod on tower 2591' from DER, 1181' left of centerline, 86' AGL/753' MSL. Parked aircraft on ramp 3627' from DER, 1225' right of centerline, 80' AGL/754' MSL.
Rwy 27R: Tanks beginning 1489' from DER, 886' left of centerline, 53' AGL/726' MSL. Lighted hopper and elevator 2778' from DER, 1020' left of centerline, 111' AGL/776' MSL.
Rwy 28: Trees beginning 1717' from DER, 752' left of centerline, up to 100' AGL/789' MSL.
Rwy 32L: Pole 1993' from DER, 791' right of centerline, 49' AGL/716' MSL.

EC-3, 07 APR 2011 to 05 MAY 2011

EC-3, 07 APR 2011 to 05 MAY 2011

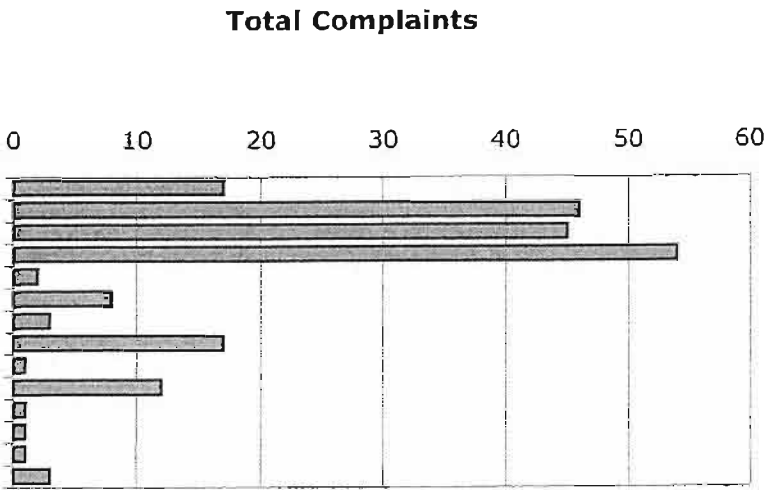
Monthly Complaints by Community[1]
All Hours

Community	Total Complaints	Number of Complainants
Arlington Heights	1	1
Bensenville	22	2
Bloomingdale	2	1
Chicago	844	26
Des Plaines	84	4
Elk Grove Village	1	1
Elmhurst	206	206
Franklin Park	1	1
Harwood Heights	21	4
Hillside	17	4
Itasca	3	1
Mount Prospect	24	1
Niles	1	1
Park Ridge	111	18
Rolling Meadows	1	1
Roselle	1	1
Rosemont	1	1
Schiller Park	2	2
Villa Park	1	1
Wood Dale	5	3
January 2011 Total	**1,349**	**280**
December 2010 Total	850	225

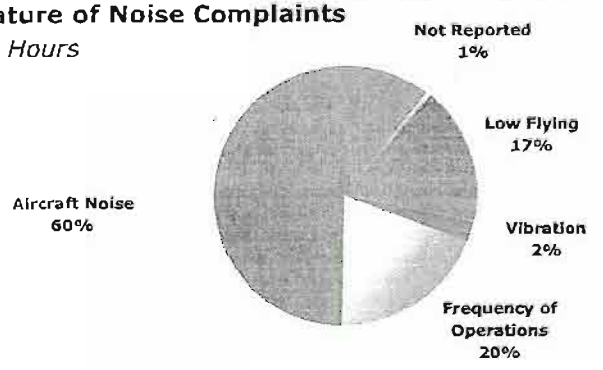


Monthly Complaints by Community[1]
Nighttime - 10:00 p.m. - 7:00 a.m.

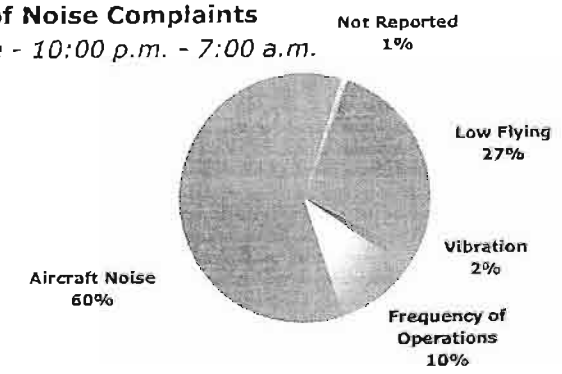
Community	Total Complaints	Number of Complainants
Bensenville	17	2
Chicago	46	10
Des Plaines	45	2
Elmhurst	54	54
Harwood Heights	2	2
Hillside	8	3
Itasca	3	1
Mount Prospect	17	1
Niles	1	1
Park Ridge	12	8
Rolling Meadows	1	1
Schiller Park	1	1
Villa Park	1	1
Wood Dale	3	3
January 2011 Total	**211**	**90**
December 2010 Total	176	85



Nature of Noise Complaints
All Hours



Nature of Noise Complaints
Nighttime - 10:00 p.m. - 7:00 a.m.



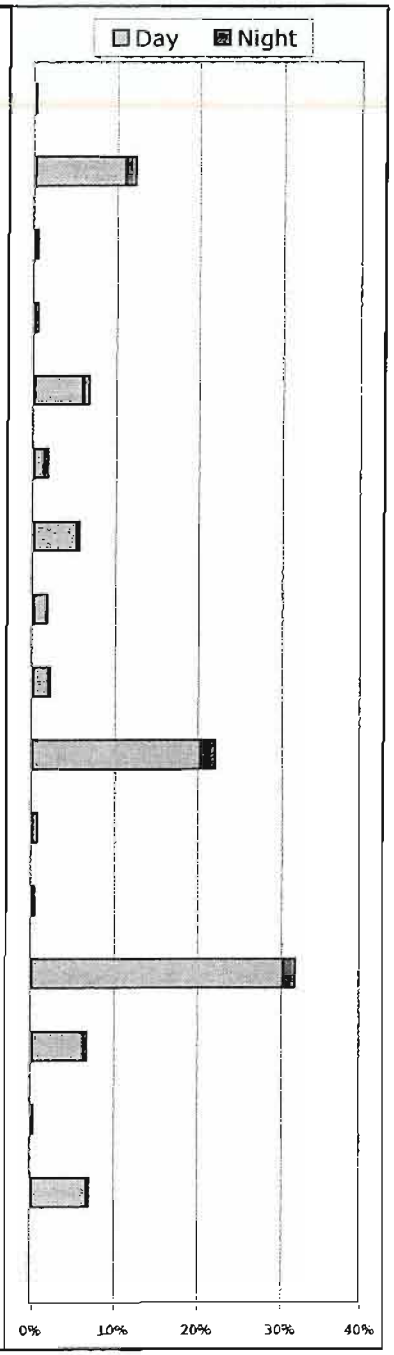
[1] Complaints made within the State of Illinois.

Aircraft Fleet Mix Report
Chicago O'Hare International Airport
Period: January 2011

CHICAGO CDA DEPARTMENT OF AVIATION

Jet Aircraft	Average Operations Per Day (All Hours)	Average Operations Per Night (10 p.m. - 7 a.m.)	*Percent of Total (All Hours)*	*Percent of Total (10 p.m. - 7 a.m.)*
A300	4	4	0.2%	2.0%
A320	268	27	12.2%	15.1%
A330	9	1	0.4%	0.4%
A340	10	1	0.5%	0.5%
B737	149	19	6.8%	10.4%
B747	37	11	1.7%	6.2%
B757	124	8	5.6%	4.6%
B767	38	4	1.7%	2.1%
B777	47	7	2.1%	4.1%
CARJ	483	37	22.0%	20.8%
DC9Q	12	0	0.6%	0.1%
DC10	7	5	0.3%	2.7%
E145	696	34	31.7%	18.9%
E170	149	11	6.8%	6.1%
MD11	5	2	0.2%	1.3%
MD80	155	8	7.1%	4.6%
Other Aircraft	0	0	0.0%	0.1%
Total	2,192	179	100%	8.2%

Percentage of Total



?

NIGHT Time ops.

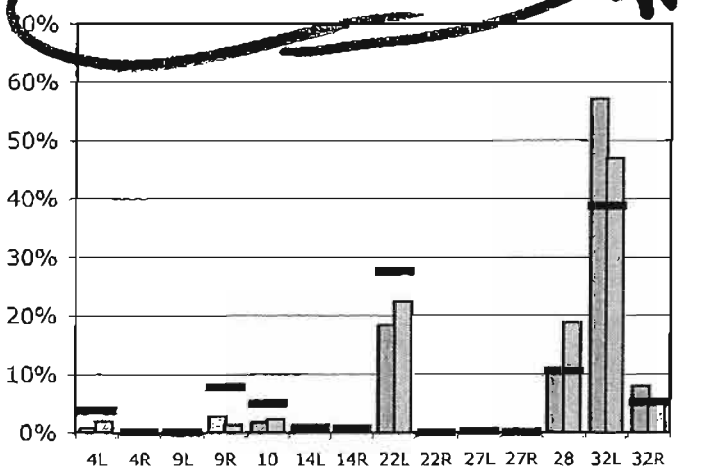
Runway Use Report
Chicago O'Hare International Airport
Period: January 2011
Time of Day: 10:00 p.m. to 7:00 a.m.

Runway Use (10 p.m. to 7 a.m.)

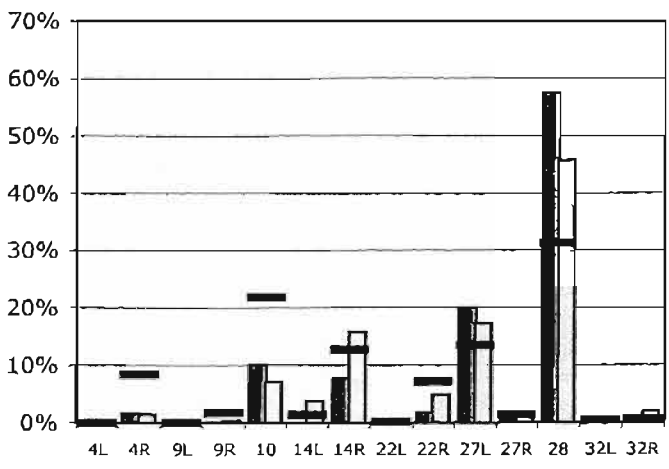
Source: Airport Noise Management System (ANMS)

	Runway Utilization													
	4L	4R	9L	9R	10	14L	14R	22L	22R	27L	27R	28	32L	32R
Average Daily Departures														
January 2011	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**16**	**0**	**0**	**0**	**10**	**49**	**7**
December 2010	2	0	0	1	2	1	0	23	0	0	0	19	47	5
12 Month Avg.	3	0	0	7	4	1	1	25	0	0	0	9	36	5
Average Daily Arrivals														
January 2011	**0**	**2**	**0**	**0**	**10**	**0**	**8**	**0**	**2**	**20**	**1**	**57**	**0**	**0**
December 2010	0	2	0	0	8	4	18	0	6	20	2	52	0	2
12 Month Avg.	0	10	0	2	26	2	15	0	8	16	2	37	0	1

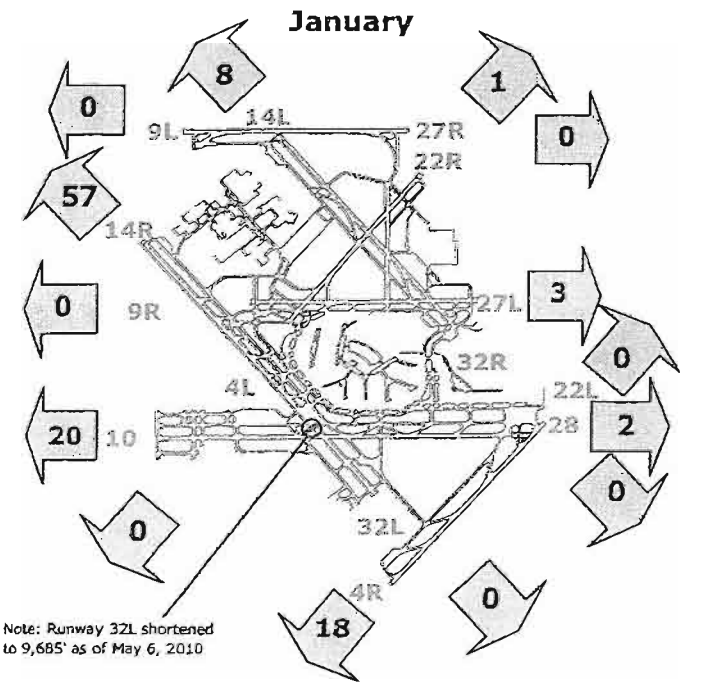
Departures (10 p.m. to 7 a.m.)



Arrivals (10 p.m. to 7 a.m.)

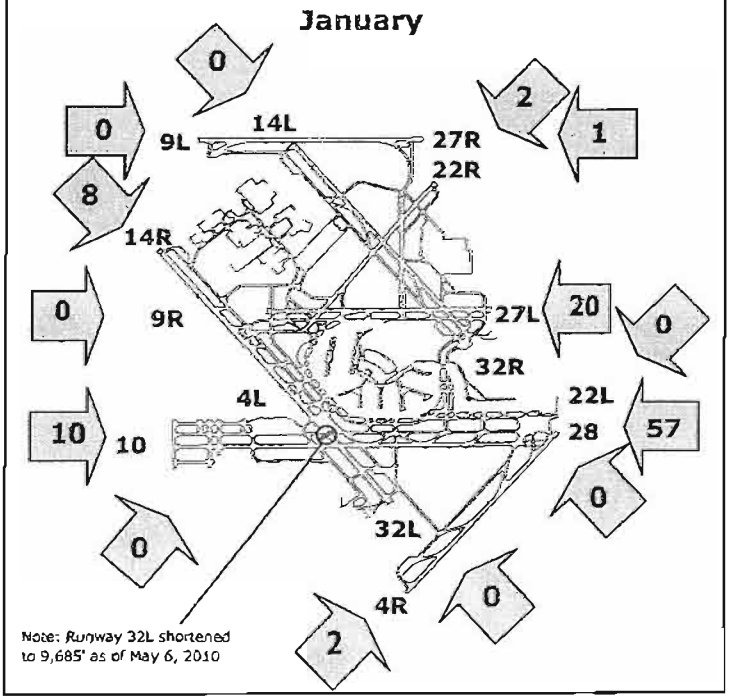


Percentage Departure Utilization



Note: Runway 32L shortened to 9,685' as of May 6, 2010

Percentage Arrival Utilization



Note: Runway 32L shortened to 9,685' as of May 6, 2010

Aircraft Fleet Mix Report

The Aircraft Fleet Mix Report summarizes the number and type of aircraft operating at O'Hare International Airport during both all hours of the day and during the nighttime hours.

In 1990, Congress enacted legislation to eliminate all Stage 2 aircraft operating in the continental United States by the year 2000. In response, the FAA created a program to "phase-out" the older, louder Stage 2 aircraft over a ten-year period to achieve full compliance by the 2000 deadline. As of January 2000, all aircraft operating at O'Hare and within the United States were Stage 3. Stage 3 aircraft, such as the Boeing 757 (B757) and new Boeing 737's (B737) use a quieter type of engine that significantly reduces noise at the source. Also, a Stage 3 aircraft can be a previous Stage 2 aircraft with the engines retrofitted with a "Hush-kit" such as a Boeing 727 (B72Q), Boeing 737-200 (B73Q) and DC-9 (DC9Q). More than **99%** of the operations at O'Hare International Airport are originally certified as Stage 3 aircraft.

Noise Complaint Report

The Chicago Department of Aviation (CDA) maintains a toll-free noise hotline (**1-800-435-9569**) and an on-line service at www.flychicago.com for citizens to express their concern about particular aircraft events or aircraft noise levels in general. The Noise Complaint Report summarizes the number of complaints received and where the complainants were located. The tabular report lists the number of complaints by community as well as the number of individual complainants. The graph at the bottom of the page illustrates the nature of complaints during the specified month.

Also shown are complaints by month displaying seasonal trends. The chart at the bottom of this page illustrates the trend in monthly complaints. These totals only include complaints made within the State of Illinois to the O'Hare Noise Hotline toll-free number or on-line feature.

Complaints by Month					
Month	**2007**	**2008**	**2009**	**2010**	**2011**
January	66	31	860	907	1,349
February	23	20	1,186	968	
March	105	60	1,069	1,222	
April	69	63	985	1,478	
May	132	92	1,235	1,168	
June	166	140	1,131	1,587	
July	185	138	1,466	1,077	
August	145	210	1,649	1,358	
September	149	151	1,883	1,290	
October	133	123	1,514	1,207	
November	50	271	825	1,234	
December	25	1,184	1,055	850	
Total Calls	**1,248**	**2,483**	**14,858**	**14,346**	**1,349**

FAA response document involving
The OMP/Night flights/Data/Analysis

U.S. Department
of Transportation
**Federal Aviation
Administration**

APR 07 2011

Great Lakes Region
2300 East Devon Avenue
Des Plaines, IL 60018

In response to your letter dated January 11, 2011, I have enclosed a document with answers to your questions regarding nighttime operations, cargo flights, and runway configurations at O'Hare International Airport (Enclosure 1).

The answers provide you with data, point you towards internet sites that contain the information you are seeking, and also refer you to tables and charts that are available from the Federal Aviation Administration's (FAA) public web site on the O'Hare Modernization Program. For your convenience, I have also enclosed copies of many of the charts and tables (Enclosure 2) to provide you with the data and help to answer your questions.

The web site address is: http://www.faa.gov/airports/airport_development/omp/.

The FAA continues to build and expand this web site so that the public can be fully informed regarding our efforts to provide a safe and efficient National Airspace System.

Thank you for sharing your perspective with the FAA.

Sincerely,

Barry D. Cooper
Regional Administrator
Great Lakes Region

2 Enclosures

Thank You Sir.
We Look Forward
Towards Your Cooperation
In Helping Reduce
The Night Time
Disturbances!
Mr. T.

Enclosure 1

FAA Answers and Background Material for January 11, 2011, Inquiry

1. **What is the correct number of the total daily flights operations projected and modeled for the EIS for O'Hare?**

   The FAA evaluated four forecast operation levels based on the 2002 FAA Terminal Area Forecast (TAF) that equated to the years 2007, 2009, 2013 and 2018. Please see the enclosed **Table B-4 – FAA TAF – Calendar Years (CY)** from the FAA's Final EIS for the anticipated aircraft operations.

   Also enclosed is the 2010 FAA **Terminal Area Forecast Detail Report** for O'Hare International Airport. This displays the latest forecast data for expected flight operations through 2020, which is lower than the forecast we released in the Final EIS in 2005.

2. **What percentage of total daily flight operations are projected to be nighttime? As modeled in the EIS for O'Hare?**

   As part of the completion of the OMP, the FAA evaluated two alternative activity levels; one representing the completion of the project, and the second representing the completion plus 5 years. At the completion of the project, on enclosed **Table F-23 Average Daily Operations – Build Out Alternative C** from the FAA's Final EIS the number of daytime and nighttime operations are depicted. For the completion of the project plus 5 years, the number of daytime and nighttime operations can be found on enclosed **Table F-27 Average Daily Operations – Build Out + 5 Alternative C** from the FAA's Final EIS.

3. **Are nighttime flights projected to increase or decrease upon completion of the OMP?**

   As shown on enclosed **Tables F-23** and **F-27**, there is anticipated to be a slight increase in nighttime operations from the completion of the OMP when compared to the completion of the OMP plus 5 years. When the OMP is completed, 163 flights at night were modeled compared to an anticipated 189 flights at night 5 years after project completion.

4. **Can flight usage percentages and directions change at will?**

   Flight usage percentages vary based on day to day wind and weather conditions.

5. **The "Operating Configurations" chart shows varying usage configurations? When operating under these configurations, what is the percentage of runway usage by the configuration?**

As part of the EIS, the FAA modeled no fewer than 5 operating configurations at each stage of the construction. These configurations represent the majority of operating conditions at the Airport. From the FAA's Final EIS, enclosed are **Exhibits D-2 through D-4** which present the runway configurations used after the commissioning of the new north Runway (most representative of today), at the completion of the first phase, and then at the end of the project. Enclosed behind each of the exhibits are the detailed number of simulated operations by runway for each configuration modeled. These are taken from the FAA's EIS Technical Simulation Modeling TAAM data presented on the FAA's O'Hare Modernization Program Document Library website and can be found at the following web address: http://www.faa.gov/airports/airport_development/omp/Modeling/Delay_and_Time/index.cfm

6. **What type of future changes in flight patterns can be expected post OMP?**

At this point in time, there are no phasing modifications beyond the completion of OMP. However, there may be changes in the Fly Quiet Program. From the FAA's Final EIS, in Chapter 5 – Environmental Consequence it states, *"At this point it is not reasonable to either assume that there would be a new Fly Quiet Program or speculate about what a new Fly Quiet Program would be. FAA will, however, give consideration to suggestions for changes in the Fly Quiet Program developed by the ONCC and requested of the FAA by the City of Chicago. It is FAA's understanding that it is the City Chicago's intent to continue the existing Fly Quiet Program. The Fly Quiet Program would be modified by ONCC in the future only if needed; such modification would be done in consultation with the FAA and the City of Chicago Department of Aviation. Modification requiring FAA action would be subsequent to its prior approval, and any necessary environmental review. If FAA's ROD approves a Build Alternative, the existing Fly Quiet Program would remain in place, except as affected by runway decommissioning. The EIS discloses the potential effects of runway decommissioning on the Fly Quiet Program."* **(page 5.1-68)**

7. **What percentage of cargo flights occur at O'Hare today and what percentage is projected post completion of the OMP?**

As is shown on **Table B-8**, the total number of cargo flights is expected to increase slightly during the study period. It is forecast to increase from 59 daily flights in the first year of analysis to 64 flights per day in 2018.

8. **What percentage of cargo flights are nighttime versus daytime?**

Although cargo flights were modeled at specific times for the OMP, a specific breakdown of nighttime versus daytime cargo flights was not included in a table in the EIS. Please see the response to Number 2 for more detail.

9. **Are the total flight operation projections taken from the INM simulations that FAA runs continuously? How frequently do these models change and how are**

these accounted for, on an ongoing basis within the EIS and within the ongoing project that is OMP?

INM Version 6.1 was available at the time of the analysis for the OMP EIS and was used to generate the results presented in the EIS. No additional runs have been made since then on the OMP. Other versions have been released, but again not used for O'Hare, by the FAA since Version 6.1 was used. The model was run to develop the noise contours and supplemental metrics presented in the EIS for the following EIS timeframes: Baseline, Construction Phase I, Construction Phase II, Build Out, and Build Out +5.

The most current model available today is Version 7.0b. The model is updated as new data is available for aircraft types, engine types, terrain modifications, flight profiles and procedure modifications. The model is developed by the FAA's Aviation Policy, Planning, and Environment Division and can be found at www.faa.gov/about/office_org/headquarters_offices/aep/models/inm_model/.

Once a Record of Decision is issued for an EIS, there is no requirement that the FAA, or any other Federal agency, perform new or updated runs due to the availability of a newer INM model version. The results presented in the O'Hare Modernization EIS continue to represent operations at O'Hare in the Baseline, Construction Phase I, Construction Phase II, Build Out, and Build Out+5 conditions.

10. **What are the correct total projected flights and runway usage percentages that can be reported for Park Ridge?**

There are a number of runways at O'Hare where arrivals or departures may fly over Park Ridge. For arrivals, the path is primarily a straight line onto the runway. For departures, there can be and are several different directions the aircraft can fly upon takeoff. Their ultimate destination and the existing wind and weather conditions are the primary contributors to which track each flight is on.

Before construction of the OMP began in 2005, it was possible that arrivals and departures from the following existing runways transit over Park Ridge: Runway 4R/22L, Runway 9L/27R (now Runway 9R/27L), and Runway 4L/22R. At the completion of the OMP, new Runway 9L/27R and future Runway 9C/27C could also produce traffic overflying Park Ridge.

For the full-build OMP during the day time, arrivals and departures, on average, will be evenly distributed around the airport, with 42 percent of aircraft flying over the west side of the airport, 49 percent over the east side, and 8 percent over the south side. Approximately 27 percent of these total flights will be flying over the northeast quadrant of the airport where Park Ridge is located.

During night time, arrivals and departures, on average, will continue to be evenly distributed; however, some runways are used more frequently during the night hours.

Approximately 45 percent of aircraft will fly over the west side of the airport, 48 percent over the east side, and 6 percent over the south side. Approximately 35 percent of these total flights will be flying over the northeast quadrant at night and 38 percent over the southwest quadrant. See enclosed **Table F-39 Runway End Use Percentage – Build Out Alternative C.**

QUESTION 1

TABLE B-3
FAA TAF FOR O'HARE – FEDERAL FISCAL YEARS (FY)

	FY 2002	FY 2003	FY 2007	FY 2009	FY 2013	FY 2018	AAGR(a) 2003-2018
Enplaned passengers	31,026,878	32,279,532	36,428,578	38,707,538	43,396,118	49,759,252	2.9%
AAGR	N/A	4.0%	3.1%	3.1%	2.9%	2.8%	N/A
Aircraft Operations	901,703	942,961	1,005,759	1,035,207	1,096,905	1,170,635	1.5%
AAGR	N/A	4.6%	1.6%	1.5%	1.5%	1.3%	N/A

Note: (a) AAGR – Average annual growth rate.
Source: 2002 FAA Terminal Area Forecast, published in March 2003.

The FAA TAF is prepared using data for the Federal Fiscal Year—the 12 months ending September 30. For purposes of the EIS, it was determined that data would be required for calendar years—the year ending December 31—in order to analyze peak month data in relation to the calendar year results. Therefore, the FAA TAF data were converted from federal fiscal years to calendar years. FAA data on calendar year activity were used to develop an estimate of calendar year 2003 enplaned passengers and aircraft operations. The FAA's forecast growth rates for future activity, as contained in the 2002 FAA TAF, were applied to the calendar year 2003 activity in order to develop a calendar year forecast consistent with the fiscal year TAF. The resulting calendar year TAF is presented in Table B-4.

TABLE B-4
FAA TAF – CALENDAR YEARS (CY)

Enplaned Passengers	CY 2003	CY 2007	CY 2009	CY 2013	CY 2018
Air Carrier					
Domestic	23,022,000	24,909,000	25,899,000	28,037,000	31,031,000
International	4,580,000	5,878,000	6,547,000	8,020,000	10,161,000
Subtotal	27,602,000	30,787,000	32,446,000	36,057,000	41,192,000
Commuter	5,007,000	6,156,000	6,703,000	7,855,000	9,180,000
Total	**32,609,000**	**36,943,000**	**39,149,000**	**43,912,000**	**50,372,000**
AAGR (a)	n/a	3.2%	2.9%	2.9%	2.8%
Aircraft Operations					
Air Carrier	614,800	646,300	664,700	704,700	761,100
Commuter/air taxi	320,900	353,600	365,300	387,000	401,800
General aviation	24,700	26,200	27,000	28,700	30,900
Military	200	200	200	200	200
Total	**960,500**	**1,026,300**	**1,057,200**	**1,120,600**	**1,194,000**
AAGR (a)	n/a	1.7%	1.5%	1.5%	1.3%

Notes: (a) AAGR – Average annual growth rate.
Source: Leigh Fisher Associates [TPC] based on assumptions stated in text.

The annual number of enplaned passengers and aircraft operations for calendar years are very similar to the fiscal year totals, as shown in the following figures.

Exhibit B-3 shows a comparison of the fiscal year TAF and the calendar year TAF for annual enplaned passengers. The average annual growth rates over the forecast period are identical, and the resulting values are almost identical (calendar year totals are slightly higher because calendar years have 3 months of more recent data than do fiscal years).

APO TERMINAL AREA FORECAST DETAIL REPORT
Forecast Issued December 2010

ORD

	Enplanements			AIRCRAFT OPERATIONS										
				Itinerant Operations					Local Operations					
Fiscal Year	Air Carrier	Commuter	Total	Air Carrier	Air Taxi & Commuter	GA	Military	Total	Civil	Military	Total	Total Ops	Total Tracon Ops	Based Aircraft
REGION:AGL **STATE:**IL **LOCID:**ORD														
CITY:CHICAGO **AIRPORT:**CHICAGO O HARE INTL														
2000	31,471,235	2,915,483	34,386,718	696,408	181,534	28,162	222	906,326	0	0	0	906,326	0	11
2001	29,645,462	3,215,891	32,861,353	676,171	226,832	24,496	397	927,896	0	0	0	927,896	0	0
2002	27,030,206	3,913,186	30,943,392	612,553	264,452	24,290	408	901,703	0	0	0	901,703	0	0
2003	27,304,852	5,278,403	32,583,255	576,875	322,485	23,941	277	923,578	0	0	0	923,578	0	0
2004	28,731,960	6,753,146	35,485,106	582,974	381,386	24,519	203	989,082	0	0	0	989,082	0	0
2005	28,644,950	7,948,922	36,593,872	625,327	329,479	25,312	254	980,372	0	0	0	980,372	0	0
2006	27,972,234	8,997,030	36,969,264	627,952	308,811	24,541	266	961,570	0	0	0	961,570	0	0
2007	28,010,312	8,732,635	36,742,947	621,661	299,892	13,606	197	935,356	0	0	0	935,356	0	0
2008	26,555,717	8,074,422	34,630,139	594,724	297,075	9,204	159	901,162	0	0	0	901,162	0	0
2009	23,111,803	8,126,789	31,238,592	549,901	272,976	6,927	157	829,961	0	0	0	829,961	0	0
2010*	22,155,127	9,727,360	31,882,487	542,701	317,413	7,407	186	867,707	0	0	0	867,707	0	0
2011*	23,786,900	10,587,356	34,374,256	556,985	356,143	6,382	185	919,695	0	0	0	919,695	0	0
2012*	24,366,785	10,716,945	35,083,730	568,130	356,239	6,408	184	930,961	0	0	0	930,961	0	0
2013*	25,025,244	10,874,698	35,899,942	581,061	357,240	6,434	184	944,919	0	0	0	944,919	0	0
2014*	25,847,550	11,156,026	37,003,576	597,749	362,241	6,461	183	966,634	0	0	0	966,634	0	0
2015*	26,710,099	11,456,681	38,166,780	615,300	367,733	6,488	183	989,704	0	0	0	989,704	0	0
2016*	27,493,592	11,723,049	39,216,641	631,507	371,815	6,515	182	1,010,019	0	0	0	1,010,019	0	0
2017*	28,303,893	11,995,610	40,299,503	648,141	375,942	6,542	181	1,030,806	0	0	0	1,030,806	0	0
2018*	29,142,079	12,274,508	41,416,587	665,212	380,115	6,569	181	1,052,077	0	0	0	1,052,077	0	0
2019*	30,009,277	12,559,890	42,569,167	682,733	384,335	6,596	180	1,073,844	0	0	0	1,073,844	0	0
2020*	30,906,666	12,851,907	43,758,573	700,717	388,601	6,623	179	1,096,120	0	0	0	1,096,120	0	0

QUESTIONS 2 & 3

TABLE F-22
AVERAGE DAILY OPERATIONS — BUILD OUT ALTERNATIVE A (NO ACTION ALTERNATIVE)

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,122	80	1,202	1,139	58	1,197	2,261	138	2,399
Wide body jet	96	33	129	98	31	129	194	64	258
Propeller	5	1	6	6	0	6	10	1	12
Total	1,223	114	1,337	1,243	89	1,332	2,466	203	2,669

Notes: (a) Data rounded to the nearest whole operation—arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

TABLE F-23
AVERAGE DAILY OPERATIONS — BUILD OUT ALTERNATIVE C

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,333	62	1,394	1,359	36	1,395	2,692	98	2,789
Wide body jet	5	1	6	6	0	6	11	1	12
Propeller	99	36	135	106	29	135	205	65	269
Total	1,436	98	1,535	1,470	65	1,536	2,907	163	3,070

Notes: (a) Data rounded to the nearest whole operation—arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

TABLE F-24
AVERAGE DAILY OPERATIONS — BUILD OUT ALTERNATIVE D

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,320	74	1,394	1,345	50	1,395	2,665	124	2,789
Wide body jet	5	1	6	6	0	6	11	1	12
Propeller	99	36	135	104	30	135	203	66	269
Total	1,424	111	1,535	1,455	80	1,536	2,879	191	3,070

Notes: (a) Data rounded to the nearest whole operation--arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

TABLE F-25
AVERAGE DAILY OPERATIONS — BUILD OUT ALTERNATIVE G

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,331	64	1,394	1,362	39	1,401	2,692	103	2,795
Wide body jet	5	1	6	6	0	6	11	1	12
Propeller	99	36	135	105	30	135	203	66	269
Total	1,434	100	1,535	1,472	69	1,541	2,906	170	3,076

Notes: (a) Data rounded to the nearest whole operation—arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004

TABLE F-26
AVERAGE DAILY OPERATIONS — BUILD OUT + 5 ALTERNATIVE A (NO ACTION ALTERNATIVE)

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,104	77	1,182	1,123	58	1,181	2,227	135	2,362
Wide body jet	112	38	150	117	33	150	229	72	300
Propeller	2	1	3	3	0	3	5	1	6
Total	1,218	117	1,335	1,243	91	1,334	2,461	208	2,669

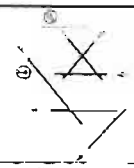
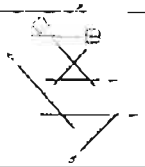
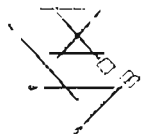
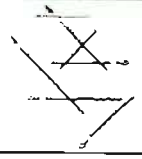
Notes: (a) Data rounded to the nearest whole operation—arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

TABLE F-27
AVERAGE DAILY OPERATIONS—BUILD OUT + 5 ALTERNATIVE C

Aircraft Category	Arrivals			Departures			Operations(a)		
	Day	Night(b)	Total	Day	Night(b)	Total	Day	Night(b)	Total
Jet	1,408	74	1,482	1,438	44	1482	2,847	118	2,965
Wide body jet	113	37	150	118	32	150	231	70	301
Propeller	2	1	3	3	0	3	5	1	6
Total	1,523	112	1,636	1,559	76	1636	3,082	189	3,271

Notes: (a) Data rounded to the nearest whole operation—arrivals and departures do not equal due to the use of actual operation data from TAAM.
(b) Night is defined as 10:00 p.m. to 6:59:59 a.m.
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

QUESTION 5

Experiment	Runway Option	Weather	Flow	Runway Configurations	Runway Diagram	Percent Utilization	Demand Level	Operations
32	2007 North Runway	VFR	East	Plan X		23.1	2007	2,898
50	2007 North Runway	VFR	West	Parallel 27s		52.0	2007	2,898
34	2007 North Runway	VFR	South	Plan B		10.6	2007	2,896
35	2007 North Runway	IFR	West	Parallel 27s		6.0	2007	2,895
37	2007 North Runway	IFR	South	Parallel 14s		3.3	2007	2,898

Existing Runways | Proposed Runways | Departure Purposes Only | Closed | Primary Arrivals | Primary Departures

Overflow Departures | Overflow Arrivals | Overflow Arrivals Dependent on use of Departure Overflow Runway | Overflow Departures Dependent on use of Arrival Overflow Runway

VFR conditions assume visibility greater than or equal to 3 miles and a ceiling greater than or equal to 1,000 feet
IFR conditions assume visibility less than 3 miles and/or cloud ceiling less than 1,000 feet

Source: Ricondo & Associates, 2004

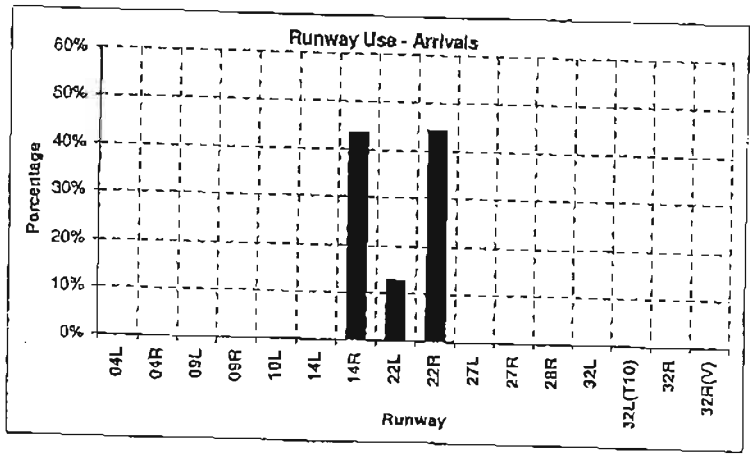
Table 2
2007 With Project Peak Month Average Day
Runway Use
Experiment 34 - Plan B

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	-	-
10L	-	-	-
14L	-	100	100
14R	628	13	641
22L	181	675	856
22R	639	-	639
27L	-	-	-
27R	-	-	-
28R	-	662	662
32L	-	-	-
32L(T10)	-	-	-
32R	-	-	-
32R(V)	-	-	-
TOTALS	1,448	1,450	2,898

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
14L	0.0%	6.9%	3.5%
14R	43.4%	0.9%	22.1%
22L	12.5%	46.6%	29.5%
22R	44.1%	0.0%	22.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28R	0.0%	45.7%	22.8%
32L	0.0%	0.0%	0.0%
32L(T10)	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
32R(V)	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



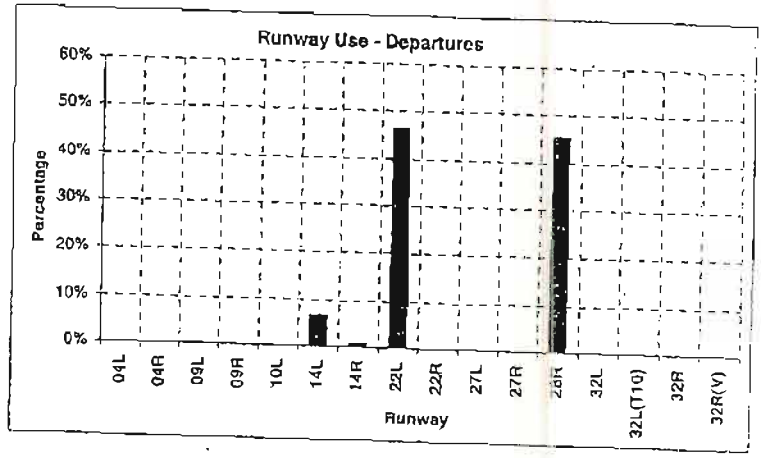


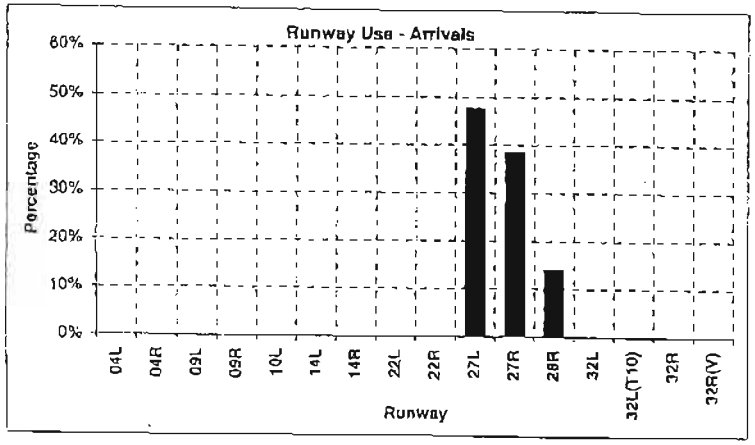
Table 2
2007 With Project Peak Month Average Day
Runway Use
Experiment 35 - IFR Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	-	-
10L	-	-	-
14L	-	-	-
14R	-	-	-
22L	-	839	839
22R	-	-	-
27L	689	-	689
27R	556	-	556
28R	202	584	786
32L	-	27	27
32L(T10)	-	-	-
32R	-	-	-
32R(V)	-	-	-
TOTALS	1,447	1,450	2,897

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	57.9%	29.0%
22R	0.0%	0.0%	0.0%
27L	47.6%	0.0%	23.8%
27R	38.4%	0.0%	19.2%
28R	14.0%	40.3%	27.1%
32L	0.0%	1.9%	0.9%
32L(T10)	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
32R(V)	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



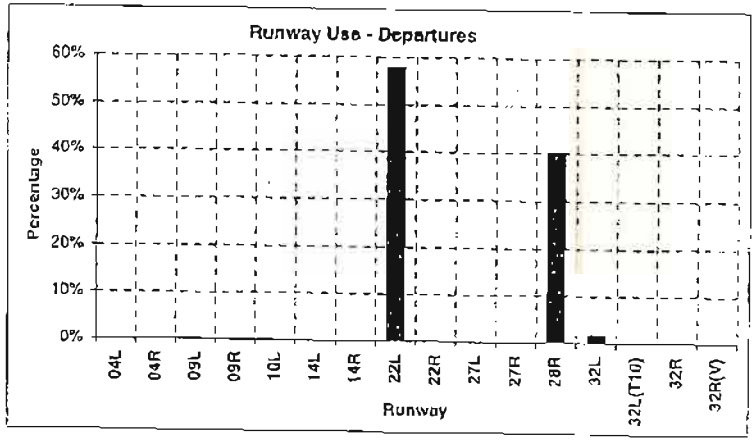


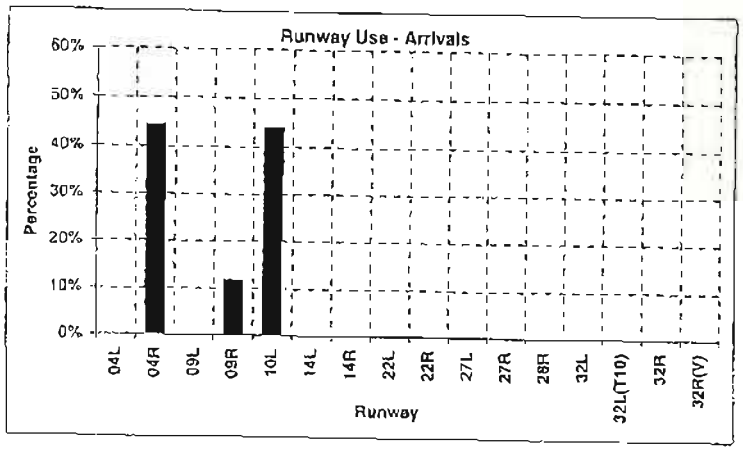
Table 2
2007 With Project Month Average Day
Runway Use
Experiment 32 - Plan X

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	358	358
04R	641	-	641
09L	-	-	-
09R	168	469	637
10L	639	34	673
14L	-	-	-
14R	-	-	-
22L	-	-	-
22R	-	-	-
27L	-	-	-
27R	-	-	-
28R	-	-	-
32L	-	19	19
32L(T10)	-	494	494
32R	-	44	44
32R(V)	-	30	30
TOTALS	1,448	1,448	2,896

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	24.7%	12.4%
04R	44.3%	0.0%	22.1%
09L	0.0%	0.0%	0.0%
09R	11.6%	32.4%	22.0%
10L	44.1%	2.3%	23.2%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
32L	0.0%	1.3%	0.7%
32L(T10)	0.0%	34.1%	17.1%
32R	0.0%	3.0%	1.5%
32R(V)	0.0%	2.1%	1.0%
TOTALS	100.0%	100.0%	100.0%



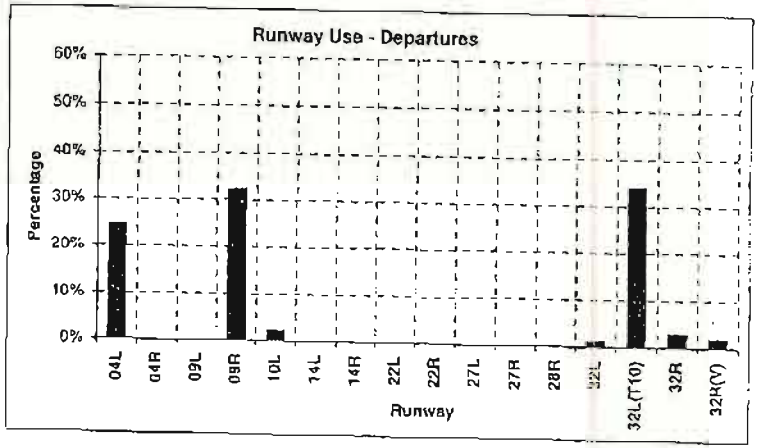


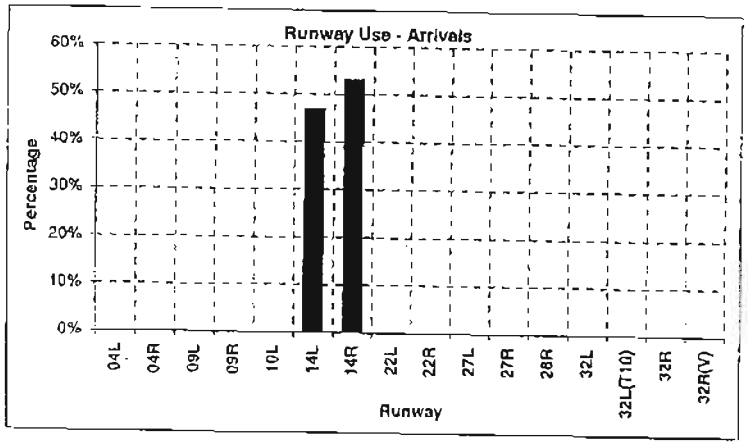
Table 2
2007 With Project Peak Month Average Day
Runway Use
Experiment 37 - IFR Parallel 14s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	348	348
10L	-	-	-
14L	680	-	680
14R	768	11	779
22L	-	622	622
22R	-	-	-
27L	-	-	-
27R	-	-	-
28R	-	469	469
32L	-	-	-
32L(T10)	-	-	-
32R	-	-	-
32R(V)	-	-	-
TOTALS	1,448	1,450	2,898

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	24.0%	12.0%
10L	0.0%	0.0%	0.0%
14L	47.0%	0.0%	23.5%
14R	53.0%	0.8%	26.9%
22L	0.0%	42.9%	21.5%
22R	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28R	0.0%	32.3%	16.2%
32L	0.0%	0.0%	0.0%
32L(T10)	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
32R(V)	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



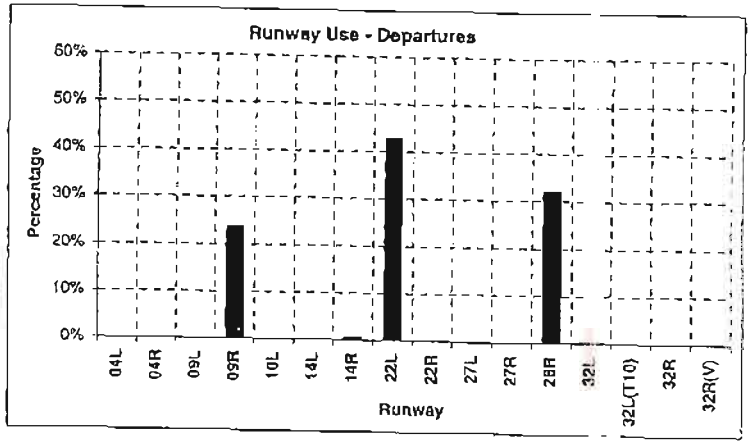


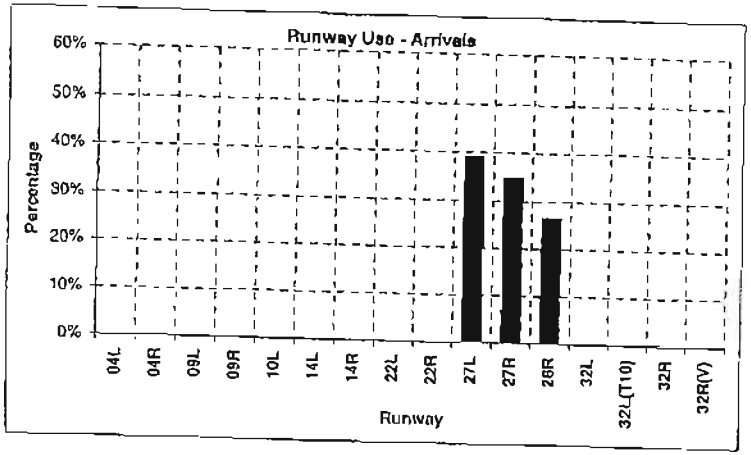
Table 2
2007 With Project Peak Month Average Day
Runway Use
Experiment 50 - Parallel 27s

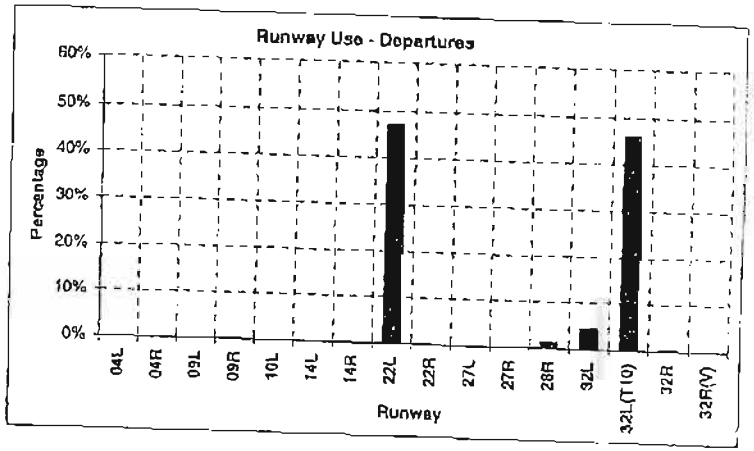
Simulated - Operations by Runway

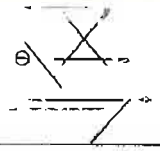
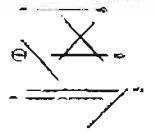
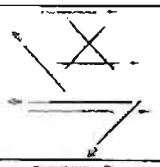
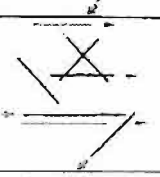
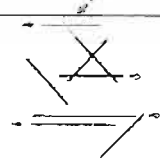
Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	-	-
10L	-	-	-
14L	-	-	-
14R	-	-	-
22L	-	687	687
22R	-	-	-
27L	563	-	563
27R	503	-	503
28R	381	20	401
32L	-	65	65
32L(T10)	-	671	671
32R	-	7	7
32R(V)	-	-	-
TOTALS	1,447	1,450	2,897

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	47.4%	23.7%
22R	0.0%	0.0%	0.0%
27L	38.9%	0.0%	19.4%
27R	34.8%	0.0%	17.4%
28R	26.3%	1.4%	13.8%
32L	0.0%	4.5%	2.2%
32L(T10)	0.0%	46.3%	23.2%
32R	0.0%	0.5%	0.2%
32R(V)	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%





Experiment	Runway Option	Weather	Flow	Runway Configuration	Runway Diagram	Percent Utilization	Demand Level	Operations
38	2009 Closely Spaced South Runway	VFR-3	East	Parallel 9s		17.9	2009	3,587
39	2009 Closely Spaced South Runway	VFR-4	East	Parallel 9s		5.2	2009	2,987
41	2009 Closely Spaced South Runway	VFR	West	Parallel 27s		67.9	2009	2,987
42	2009 Closely Spaced South Runway	IFR	West	Parallel 27s		4.8	2009	2,987
43	2009 Closely Spaced South Runway	IFR	East	Parallel 9s		4.5	2009	2,987

Existing Runways

Proposed Runways

Departure Purposes Only

Closed

Primary Arrivals

Primary Departures

Overflow Departures

Overflow Arrivals

Overflow Arrivals Dependent on use of Departure Overflow Runway

Overflow Departures Dependent on use of Arrival Overflow Runway

Source: Ricondo & Associates, 2004

Chicago O'Hare International Airport

O'Hare Modernization Environmental Impact Statement

2009 Experimental Design for Alternatives C, D, & G

▶ Exhibit D-3

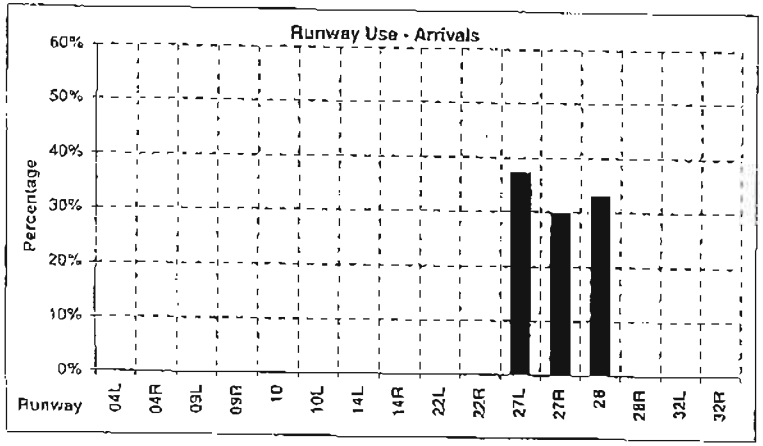
Table 2
2009 With Project Peak Month Average Day
Runway Use
Experiment 41 - VFR Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
14L	-	-	-
14R	-	-	-
22L	-	550	550
22R	-	-	-
27L	555	-	555
27R	444	-	444
28	494	1	495
28R	-	519	519
32L	-	424	424
32R	-	-	-
TOTALS	1,493	1,494	2,987

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	36.8%	18.4%
22R	0.0%	0.0%	0.0%
27L	37.2%	0.0%	18.6%
27R	29.7%	0.0%	14.9%
28	33.1%	0.1%	16.6%
28R	0.0%	34.7%	17.4%
32L	0.0%	28.4%	14.2%
32R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



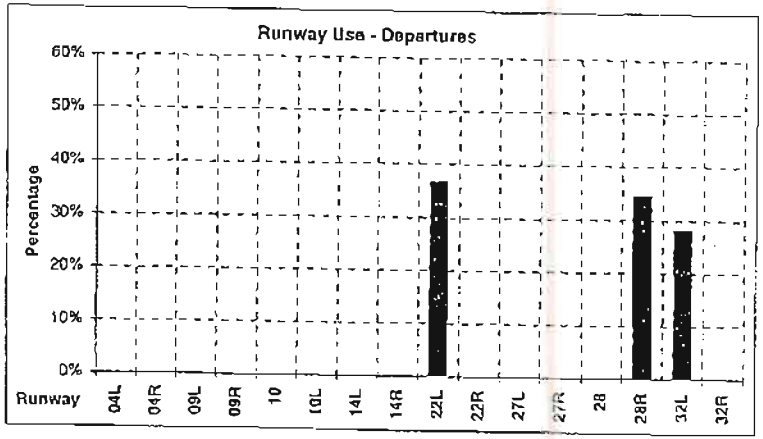


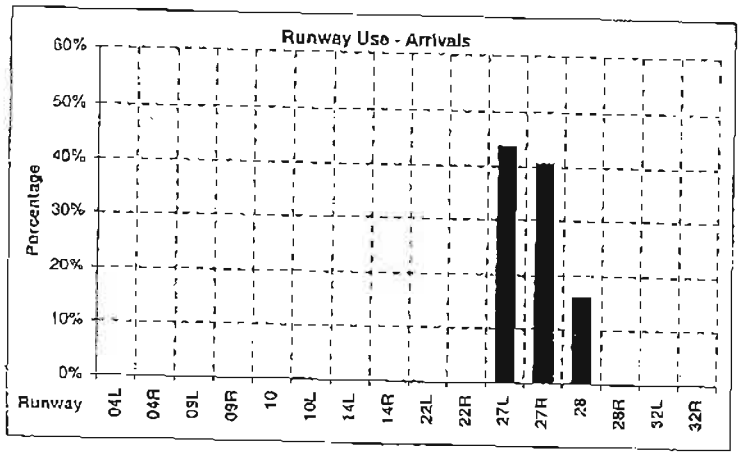
Table 2
2009 With Project Peak Month Average Day
Runway Use
Experiment 42 - IFR Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
14L	-	-	-
14R	-	-	-
22L	-	841	841
22R	-	-	-
27L	650	-	650
27R	604	-	604
28	239	1	240
28R	-	652	652
32L	-	-	-
32R	-	-	-
TOTALS	1,493	1,494	2,987

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	56.3%	28.2%
22R	0.0%	0.0%	0.0%
27L	43.5%	0.0%	21.8%
27R	40.5%	0.0%	20.2%
28	16.0%	0.1%	8.0%
28R	0.0%	43.6%	21.8%
32L	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



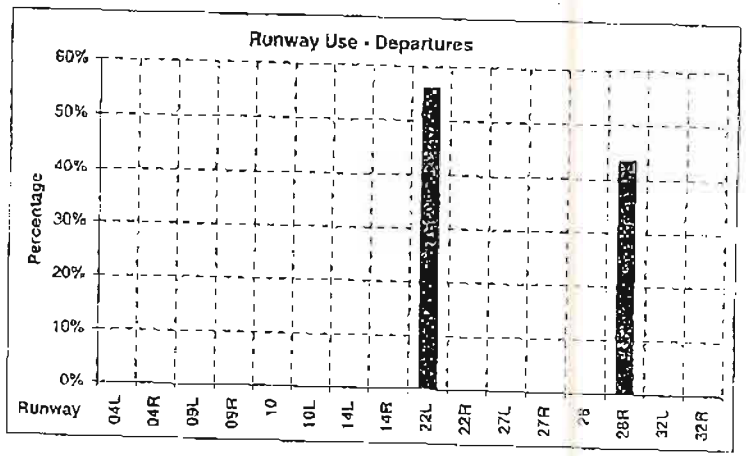


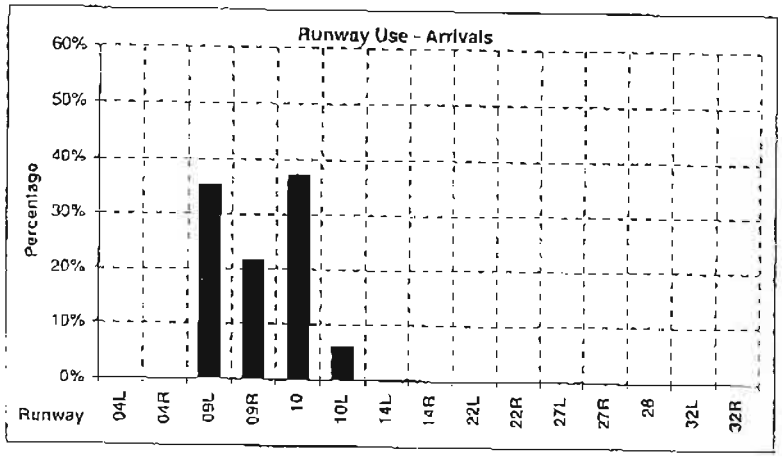
Table 2
2009 With Project Peak Month Average Day
Runway Use
Experiment 38 - VFR-3 Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	453	453
04R	-	-	-
09L	526	-	526
09R	325	289	614
10	554	1	555
10L	88	751	839
14L	-	-	-
14R	-	-	-
22L	-	-	-
22R	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
32L	-	-	-
32R	-	-	-
TOTALS	1,493	1,494	2,987

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	30.3%	15.2%
04R	0.0%	0.0%	0.0%
09L	35.2%	0.0%	17.6%
09R	21.8%	19.3%	20.6%
10	37.1%	0.1%	18.6%
10L	5.9%	50.3%	28.1%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
32L	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



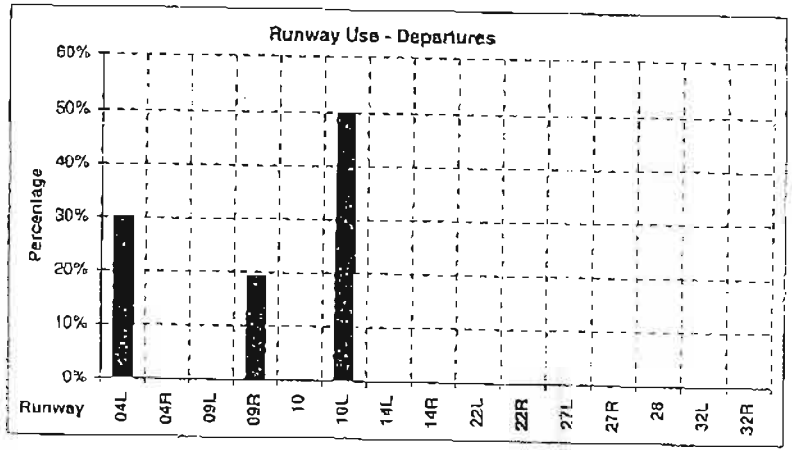


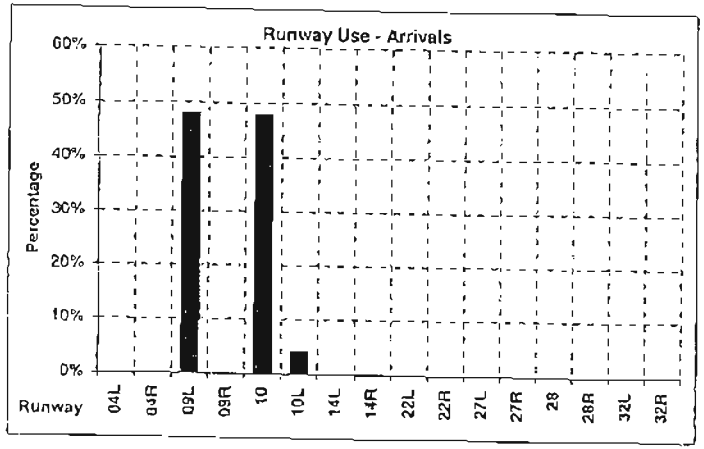
Table 2
2009 With Project Peak Month Average Day
Runway Use
Experiment 43 - IFR Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	718	-	718
09R	-	862	862
10	716	1	717
10L	59	630	689
14L	-	-	-
14R	-	-	-
22L	-	-	-
22R	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28R	-	-	-
32L	-	-	-
32R	-	-	-
TOTALS	1,493	1,493	2,986

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	48.1%	0.0%	24.0%
09R	0.0%	57.7%	28.9%
10	48.0%	0.1%	24.0%
10L	4.0%	42.2%	23.1%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
32L	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



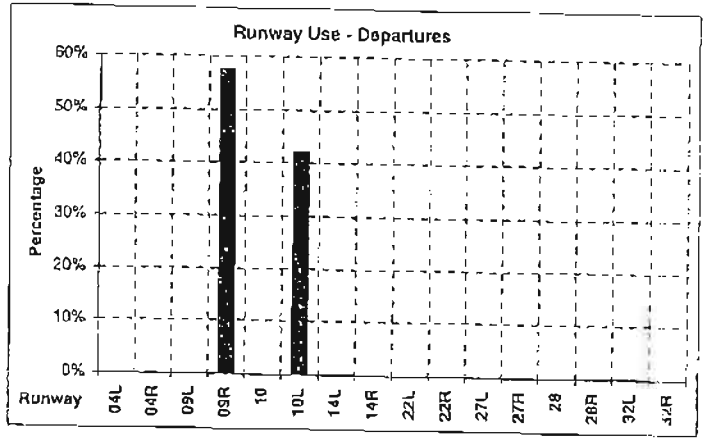


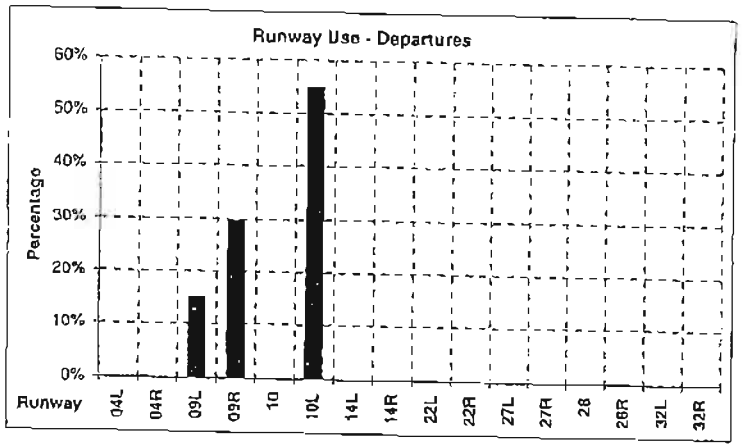
Table 2
2009 With Project Peak Month Average Day
Runway Use
Experiment 39 - VFR-4 Parallel 9s

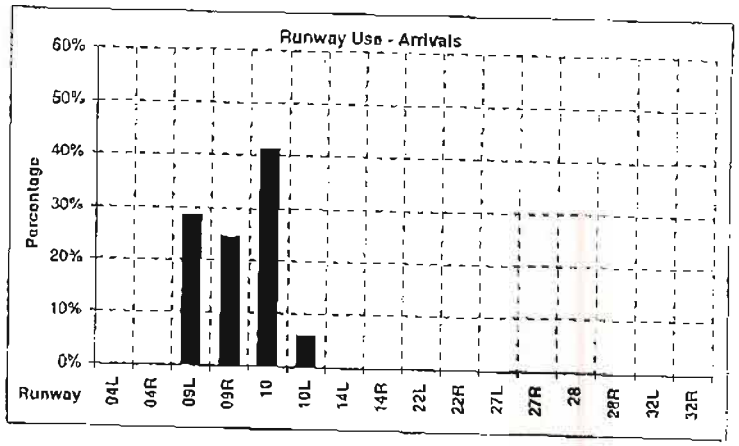
Simulated - Operations by Runway

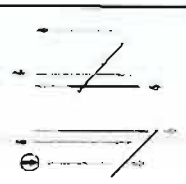
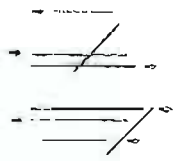
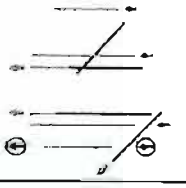
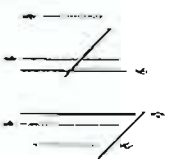
Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
09L	426	228	654
09R	366	445	811
10	616	1	617
10L	85	820	905
14L	-	-	-
14R	-	-	-
22L	-	-	-
22R	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28R	-	-	-
32L	-	-	-
32R	-	-	-
TOTALS	1,493	1,494	2,987

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
09L	28.5%	15.3%	21.9%
09R	24.5%	29.8%	27.2%
10	41.3%	0.1%	20.7%
10L	5.7%	54.9%	30.3%
14L	0.0%	0.0%	0.0%
14R	0.0%	0.0%	0.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
32L	0.0%	0.0%	0.0%
32R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%





Experiment	Runway Option	Weather	Flow	Runway Configurations	Runway Diagram	Percent Utilization	Demand Level	Operations
44	Alternative C	VFR-1	East	Parallel 9s (Quads)		12.6	2013	3,169
33							2018	3,374
45	Alternative C	VFR-2[a]	East	Parallel 9s (Trips)		10.5	2013	3,169
51							2018	3,374
46	Alternative C	VFR-1[a]	West	Parallel 27s (Quads)		41.4	2013	3,169
52							2018	3,374
47	Alternative C	VFR-2[a]	West	Parallel 27s (Trips)		26.1	2013	3,169
53							2018	3,374
48	Alternative C	IFR	East	Parallel 9s		4.5	2013	3,169
54							2018	3,374
49	Alternative C	IFR	West	Parallel 27s		4.8	2013	3,169
55							2018	3,169

Existing Runways | Proposed Runways | Departure Purposes Only | Closed | Primary Arrivals | Primary Departures

Overflow Departures | Overflow Arrivals | Overflow Arrivals Dependent on use of Departure Overflow Runway | Overflow Departures Dependent on use of Arrival Overflow Runway

[a] VFR conditions assume visibility greater than or equal to 3 miles and cloud ceiling greater than or equal to 1,000 feet. IFR conditions assume visibility less than 3 miles and cloud ceiling less than 1,000 feet.

Source: Ricondo & Associates, 2004.

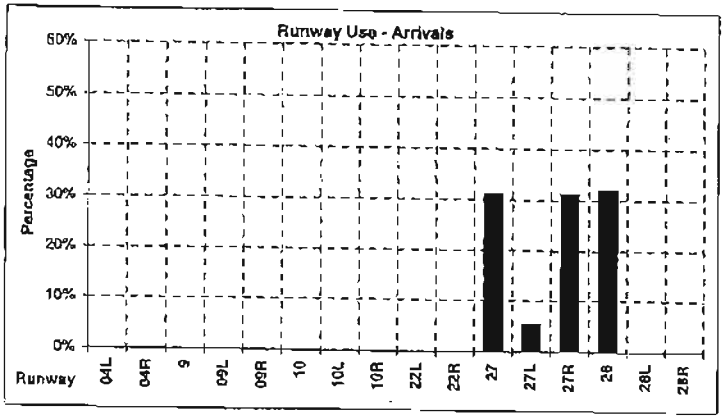
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 47 - VFR-2 Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
10R	-	-	-
22L	-	441	441
22R	-	-	-
27	496	1	497
27L	85	526	611
27R	496	-	496
28	507	1	508
28L	-	-	-
28R	-	616	616
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
10R	0.0%	0.0%	0.0%
22L	0.0%	27.8%	13.9%
22R	0.0%	0.0%	0.0%
27	31.3%	0.1%	15.7%
27L	5.4%	33.2%	19.3%
27R	31.3%	0.0%	15.7%
28	32.0%	0.1%	16.0%
28L	0.0%	0.0%	0.0%
28R	0.0%	38.9%	19.4%
TOTALS	100.0%	100.0%	100.0%



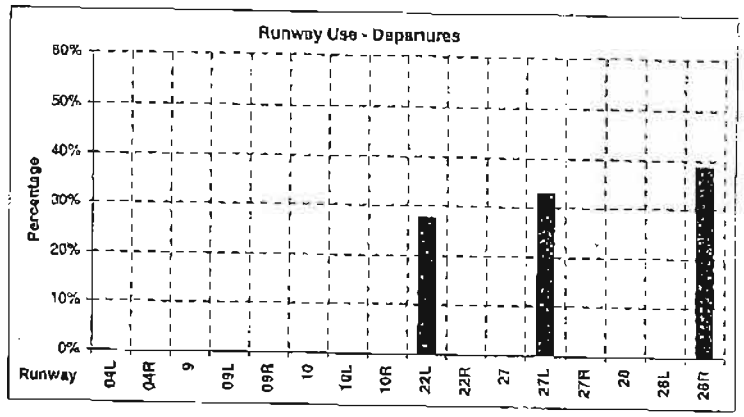


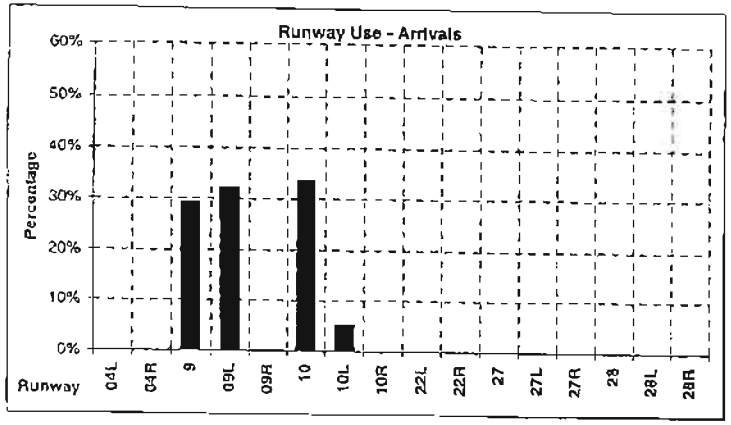
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 48 - IFR Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	464	1	465
09L	509	-	509
09R	-	498	498
10	531	1	532
10L	80	547	627
10R	-	538	538
22L	-	-	-
22R	-	-	-
27	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28L	-	-	-
28R	-	-	-
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	29.3%	0.1%	14.7%
09L	32.1%	0.0%	16.1%
09R	0.0%	31.4%	15.7%
10	33.5%	0.1%	16.8%
10L	5.1%	34.5%	19.8%
10R	0.0%	33.9%	17.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28L	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



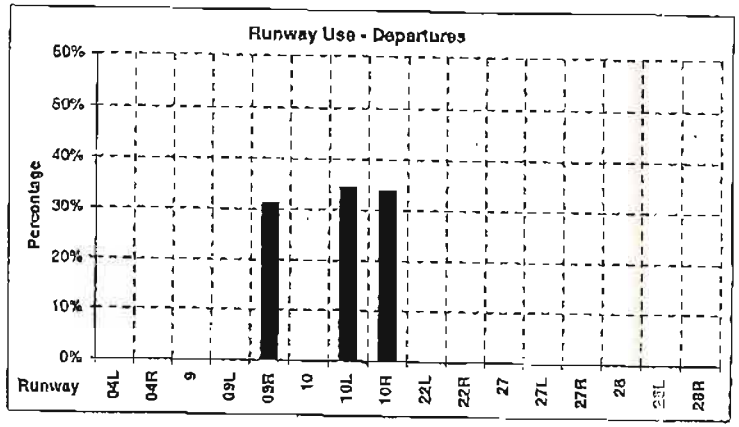


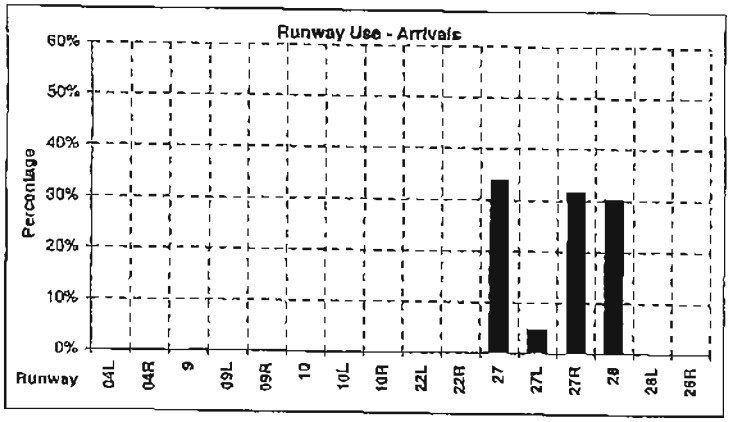
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 49 - IFR Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
10R	-	-	-
22L	-	566	566
22R	-	-	-
27	535	1	536
27L	72	508	580
27R	499	-	499
28	478	1	479
28L	-	-	-
28R	-	509	509
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
10R	0.0%	0.0%	0.0%
22L	0.0%	35.7%	17.9%
22R	0.0%	0.0%	0.0%
27	33.8%	0.1%	16.9%
27L	4.5%	32.1%	18.3%
27R	31.5%	0.0%	15.7%
28	30.2%	0.1%	15.1%
28L	0.0%	0.0%	0.0%
28R	0.0%	32.1%	16.1%
TOTALS	100.0%	100.0%	100.0%



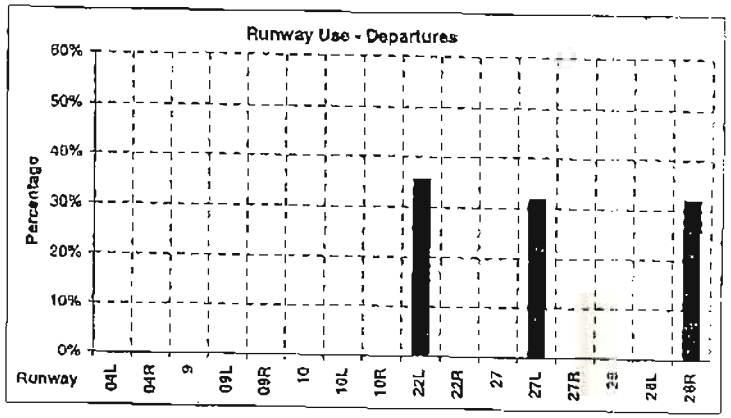


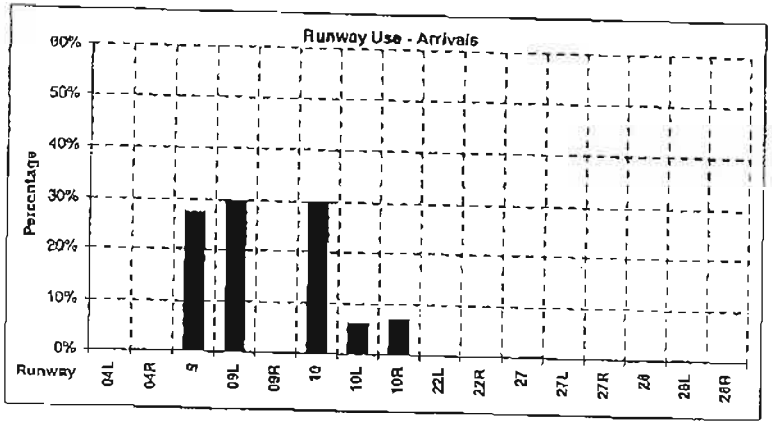
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 44 - VFR-1 Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	436	1	437
09L	472	-	472
09R	-	629	629
10	474	1	475
10L	93	635	728
10R	109	319	428
22L	-	-	-
22R	-	-	-
27	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28L	-	-	-
28R	-	-	-
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	27.5%	0.1%	13.8%
09L	29.8%	0.0%	14.9%
09R	0.0%	39.7%	19.8%
10	29.9%	0.1%	15.0%
10L	5.9%	40.1%	23.0%
10R	6.9%	20.1%	13.5%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28L	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



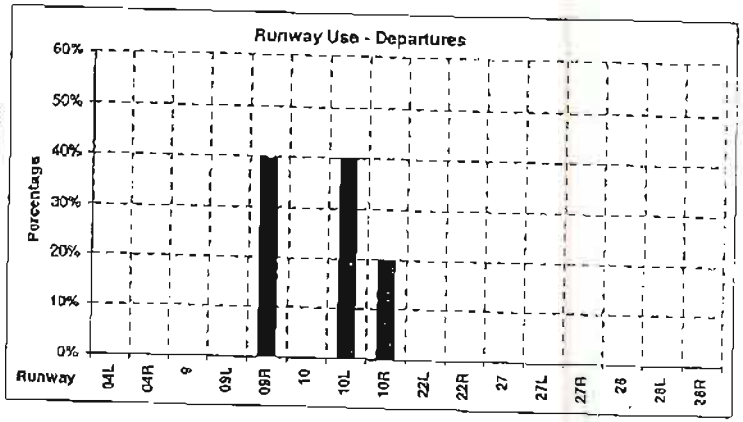


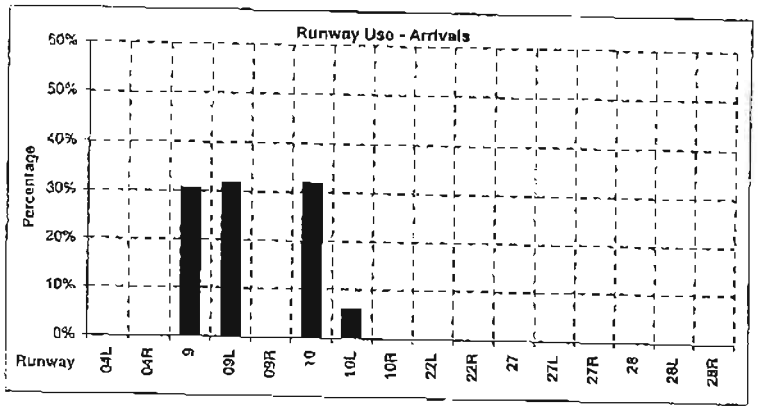
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 45 - VFR-2 Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	486	1	487
09L	502	-	502
09R	-	604	604
10	504	1	505
10L	92	672	764
10R	-	307	307
22L	-	-	-
22R	-	-	-
27	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28L	-	-	-
28R	-	-	-
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	30.7%	0.1%	15.4%
09L	31.7%	0.0%	15.8%
09R	0.0%	38.1%	19.1%
10	31.8%	0.1%	15.9%
10L	5.8%	42.4%	24.1%
10R	0.0%	19.4%	9.7%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28L	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



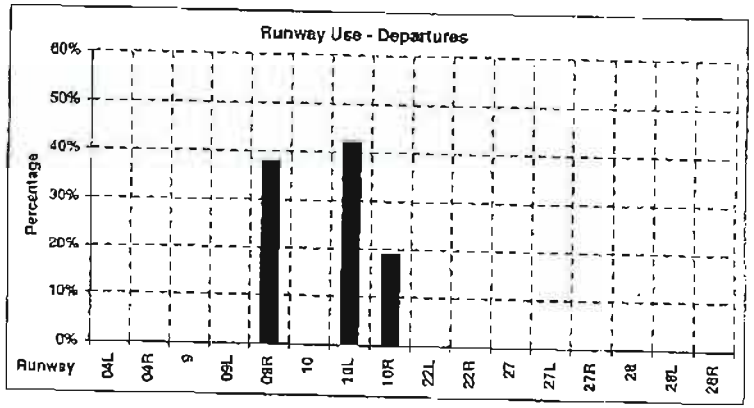


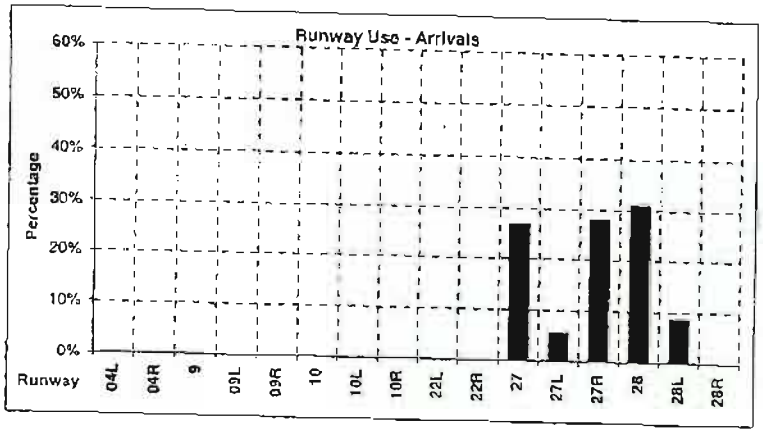
Table 2
2013 With Project Peak Month Average Day
Runway Use
Experiment 46 - VFR-1 Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
10R	-	-	-
22L	-	260	260
22R	-	-	-
27	426	1	427
27L	86	567	653
27R	445	-	445
28	491	1	492
28L	136	100	236
28R	-	656	656
TOTAL	1,584	1,585	3,169

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
10R	0.0%	0.0%	0.0%
22L	0.0%	16.4%	8.2%
22R	0.0%	0.0%	0.0%
27	26.9%	0.1%	13.5%
27L	5.4%	35.8%	20.6%
27R	28.1%	0.0%	14.0%
28	31.0%	0.1%	15.5%
28L	8.6%	6.3%	7.4%
28R	0.0%	41.4%	20.7%
TOTALS	100.0%	100.0%	100.0%



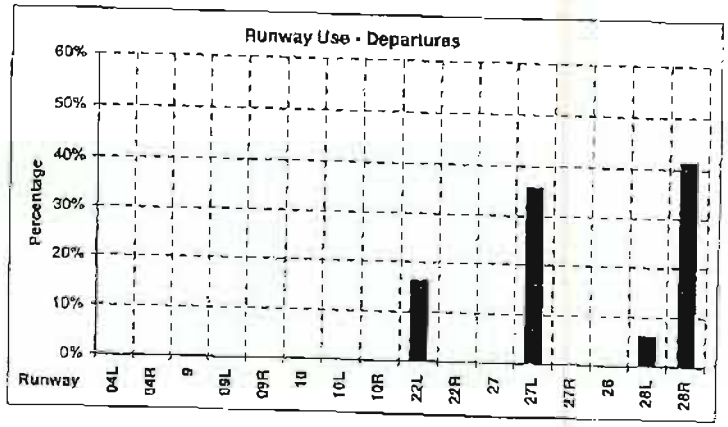


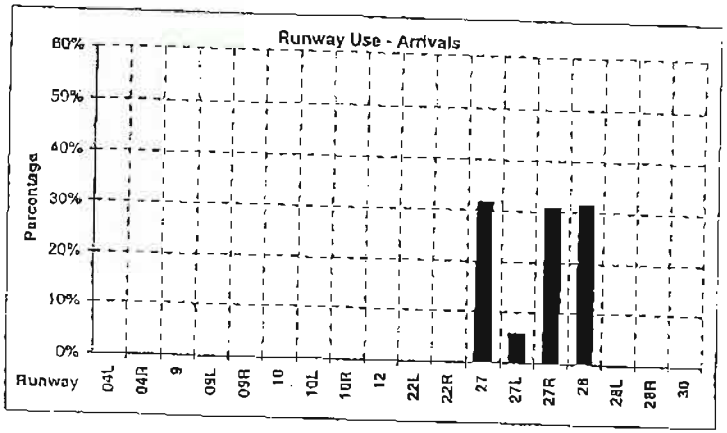
Table 2
2018 With Project Peak Month Average Day
Runway Use
Experiment 53 - VFR-2 Parallel 27s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	-	-	-
09L	-	-	-
09R	-	-	-
10	-	-	-
10L	-	-	-
10R	-	-	-
12	-	-	-
22L	-	441	441
22R	-	-	-
27	535	3	538
27L	98	578	676
27R	521	-	521
28	533	3	536
28L	-	-	-
28R	-	662	662
30	-	-	-
TOTAL	1,687	1,687	3,374

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	0.0%	0.0%	0.0%
09L	0.0%	0.0%	0.0%
09R	0.0%	0.0%	0.0%
10	0.0%	0.0%	0.0%
10L	0.0%	0.0%	0.0%
10R	0.0%	0.0%	0.0%
12	0.0%	0.0%	0.0%
22L	0.0%	26.1%	13.1%
22R	0.0%	0.0%	0.0%
27	31.7%	0.2%	15.9%
27L	5.8%	34.3%	20.0%
27R	30.9%	0.0%	15.4%
28	31.6%	0.2%	15.9%
28L	0.0%	0.0%	0.0%
28R	0.0%	39.2%	19.6%
30	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



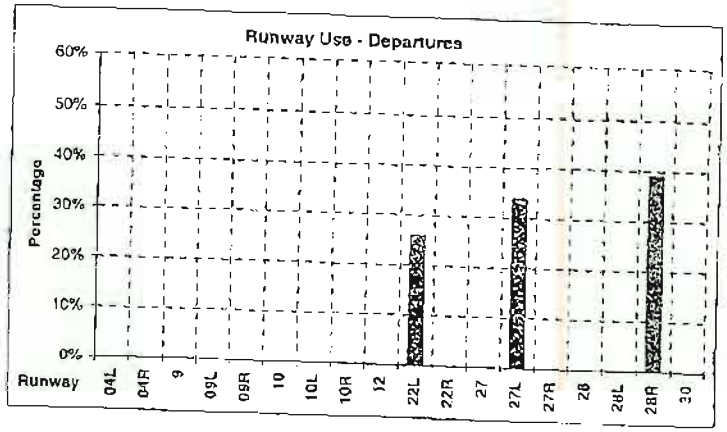


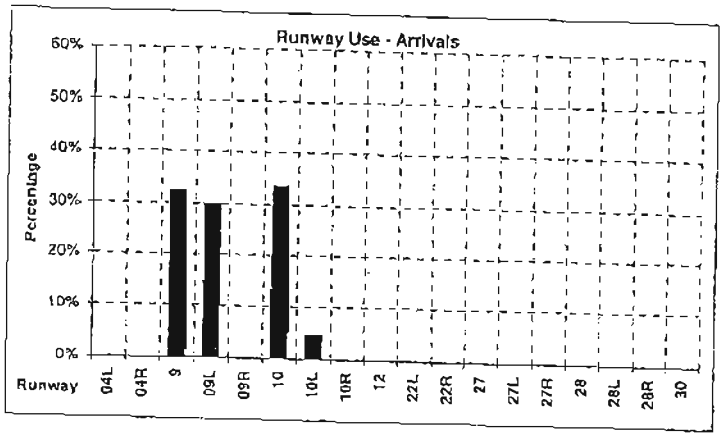
Table 2
2018 With Project Peak Month Average Day
Runway Use
Experiment 54 - IFR Parallel 9s

Simulated - Operations by Runway

Runway	Arrivals	Departures	Grand Total
04L	-	-	-
04R	-	-	-
9	544	3	547
09L	503	-	503
09R	-	523	523
10	564	3	567
10L	76	555	631
10R	-	603	603
12	-	-	-
22L	-	-	-
22R	-	-	-
27	-	-	-
27L	-	-	-
27R	-	-	-
28	-	-	-
28L	-	-	-
28R	-	-	-
30	-	-	-
TOTAL	1,687	1,687	3,374

Percentage of Runway Use

Runway	Arrivals	Departures	Grand Total
04L	0.0%	0.0%	0.0%
04R	0.0%	0.0%	0.0%
9	32.2%	0.2%	16.2%
09L	29.8%	0.0%	14.9%
09R	0.0%	31.0%	15.5%
10	33.4%	0.2%	16.8%
10L	4.5%	32.9%	18.7%
10R	0.0%	35.7%	17.9%
12	0.0%	0.0%	0.0%
22L	0.0%	0.0%	0.0%
22R	0.0%	0.0%	0.0%
27	0.0%	0.0%	0.0%
27L	0.0%	0.0%	0.0%
27R	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%
28L	0.0%	0.0%	0.0%
28R	0.0%	0.0%	0.0%
30	0.0%	0.0%	0.0%
TOTALS	100.0%	100.0%	100.0%



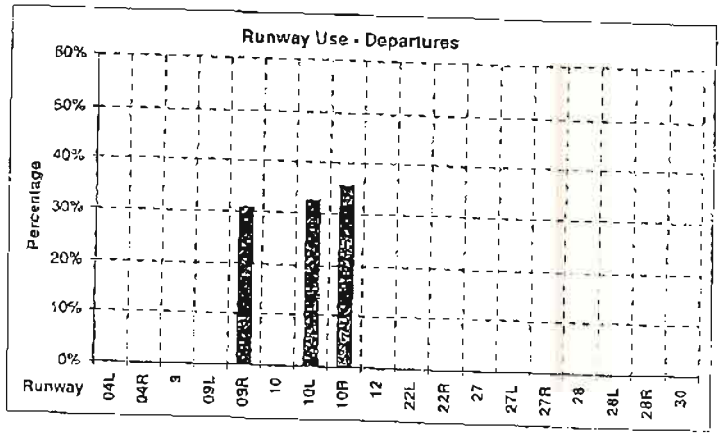


TABLE B-8
UNCONSTRAINED PEAK MONTH AVERAGE DAY AIRCRAFT OPERATIONS

	2003	2007	2009	2013	2018
Air Carrier					
Domestic	1,475	1,520	1,546	1,606	1,693
International	218	274	300	354	426
Cargo	60	59	60	62	64
Subtotal	1,754	1,853	1,906	2,022	2,184
Commuter/air taxi					
Commuter	861	945	976	1,037	1,086
Air taxi	51	60	62	63	56
Subtotal	912	1,005	1,038	1,100	1,142
General Aviation					
Unadjusted	77	74	77	81	88
Helicopter adjustment	0	(32)	(33)	(35)	(38)
Adjusted	77	42	44	46	50
Military	1	1	1	1	1
Total	2,744	2,901	2,989	3,169	3,376

Note: "()" indicates a negative value.
Source: Leigh Fisher Associates [TPC]

Table B-8 also shows an adjustment to the general aviation aircraft operations used to determine PMAD activity levels. The general aviation aircraft operations reported by FAA at O'Hare include a certain number of helicopter operations, primarily associated with local traffic (e.g. police and news reporting) functions that do not use the O'Hare airfield and therefore do not contribute to airfield demand. For purposes of developing the detailed aircraft operations flight schedules for input to the EIS technical analyses, it was determined that these helicopter flights should not be included. Therefore, an adjustment was made to remove these helicopter operations for the future forecast years (2007, 2009, 2013, and 2018) as shown in Table B-8. The adjustment was based on an analysis of data on actual helicopter operations in 2002 and 2003.

B.4 FORECAST OF UNCONSTRAINED PMAD FLIGHT SCHEDULES

For input to simulation analyses such as airfield demand-capacity analysis required in connection with the EIS, a detailed flight schedule of aircraft operations is required. This detailed flight schedule includes individual arriving and departing flights, with information on airline, origin/destination, equipment type, and arrival/departure time. Passenger-related data in the flight schedule includes passengers per operation (based on an assumed boarding load factor) and the split of origin-destination and connecting passengers.

The forecast PMAD operations levels reported above served as the "control totals" for the number of aircraft operations to be included in the detailed flight schedules for each forecast year. Using these control totals, additional assumptions were developed to produce the flight schedules, as described below.

QUESTION 10

TABLE F-39
RUNWAY END USE PERCENTAGE — BUILD OUT ALTERNATIVE C

Runway	Arrivals		Departures		Operations	
	Day (%)	Night (%) (a)	Day (%)	Night (%) (a)	Day (%)	Night (%) (a)
04L	0.0	0.0	0.8	1.2	0.4	0.5
04R	0.8	1.0	0.0	0.0	0.4	0.6
09L	8.8	1.0	0.1	0.0	4.4	0.6
09R	0.1	0.0	10.4	4.1	5.3	1.7
22L	0.0	0.0	16.2	10.8	8.2	4.6
22R	0.3	0.3	0.0	0.0	0.1	0.2
27L	0.0	59.8	25.3	12.2	12.8	39.7
27R	22.4	4.0	0.3	0.1	11.2	2.3
09C	8.2	0.6	0.0	0.0	4.1	0.3
10C	8.9	1.3	0.0	0.0	4.4	0.7
10L	0.0	23.8	10.3	20.4	5.2	22.4
10R	0.9	0.0	6.1	1.2	3.5	0.5
27C	22.1	2.9	0.0	0.0	11.0	1.7
28C	23.5	5.3	0.0	0.0	11.7	3.1
28R	0.2	0.1	27.7	50.0	14.1	21.2
28L	3.8	0.0	2.7	0.0	3.3	0.0
Total(b)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes: (a) Night is defined as 10:00 p.m. to 6:59:59 a.m.
(b) Totals may not add due to rounding
Source: Leigh Fisher Associates [TPC] analysis, October 2004.

TABLE F-40
RUNWAY END USE PERCENTAGE — BUILD OUT ALTERNATIVE D

Runway	Arrivals		Departures		Operations	
	Day (%)	Night (%) (a)	Day (%)	Night (%) (a)	Day (%)	Night (%) (a)
04L	0.0	0.0	0.6	3.6	0.3	1.6
04R	0.6	2.9	0.0	0.0	0.3	1.6
09L	9.2	6.8	0.1	0.1	4.7	3.8
09R	0.1	0.0	14.0	13.0	7.1	5.8
22L	0.0	0.0	21.4	9.1	10.8	4.1
22R	0.3	0.3	0.0	0.0	0.1	0.1
27L	0.0	52.6	24.5	9.4	12.3	33.3
27R	24.0	4.6	0.2	0.1	12.0	2.6
09C	8.1	2.9	0.0	0.0	4.0	1.6
10C	8.9	4.0	0.0	0.0	4.4	2.2
10L	0.0	20.2	12.1	23.5	6.1	21.7
27C	24.2	3.3	0.0	0.0	12.0	1.8
28C	24.3	2.6	0.0	0.0	12.1	1.4
28R	0.2	0.0	26.8	41.1	13.6	18.4
Total(b)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes: (a) Night is defined as 10:00 p.m. to 6:59:59 a.m.
(b) Totals may not add due to rounding
Source: Leigh Fisher Associates [TPC] analysis, October 2004.